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TOLEDO PACKING PLANT RUMOR.

The report is again circulated in Toledo, O., of the location there of a new packing plant near the present works of the Toledo Reduction Co. The plan includes the establishment of stock yards. Chicago and Omaha people are said to be behind the deal.

LEVER COTTON OIL MILLS SOLD.

An important transaction last week in the cotton oil field was the sale of the two plants of the Lever Bros., Ltd., at Vicksburg, Miss., and Marshall, Tex., to the Kentucky Refining Company. The deal involved in the neighborhood of \$115,000. Lever Bros. is a London concern. The Vicksburg plant included a soap factory and a refinery, with a capacity of 200 tons per day. The new owners will continue to operate the plants to capacity.

ARMOUR BUYS MUCH CITY WATER.

The Armour plant at Kansas City uses a lot of water. It is already taking over three million gallons a day from the Kansas City, Kas., company, and has just contracted with the authorities of Kansas City, Mo., for half a million gallons a day more. To serve the plant at Armourdale 300 feet of pipe line is being laid by the city to the Missouri State line, and 700 feet more by the company from the line to the plant.

NASHVILLE BARS PRESERVATIVES.

An ordinance is now before the City Council of Nashville, Tenn., which bears all the earmarks of the foodomaniac. It not only prohibits the sale of food containing dangerous ingredients, but it puts the ban on every kind of preservative, and inflicts heavy penalties. The prohibitory clause of the proposed law reads that "it shall be unlawful for any person, firm or corporation, either by himself, or by his, her or their servants, officers or agents, to sell, offer for sale, expose for sale, or have in possession with intention to sell any article of food which contains sulphurous acid or any of its salts; boracic acid or any of its salts; formaldehyde, the fluorides, salicylic acid or any of its salts, benzoic acid or any of its salts, beta-naphthol or hydro-naphthol, or any similar ingredients that are known and may hereafter be discovered to be injurious to foods."

NOBODY GETS THE REWARD.

The Texas State authorities announce that the \$50,000 reward offered for a boll weevil remedy will not be paid. That sum was appropriated by the last Legislature for a remedy or device which should prove successful in eradicating the pest. It is now stated that of all the schemes investigated by the State boll weevil commission, not one has been considered worthy the reward. It is the opinion of the commission that early planting and intense farming is the only way to combat the boll weevil successfully.

DEATH OF F. E. MORGAN.

F. E. Morgan, one of the best known beef men in the trade, died at Cambridge Spring, Pa., Aug. 9. For many years Mr. Morgan was connected with the Swift interests and managed their Pittsburg branch for several years. Subsequently he became superintendent of the beef and small stock department of the Pittsburg Provision and Packing Co. Few men in the trade had such a host of friends, and the large cortege that followed his remains to their last resting place bore eloquent testimony to the respect in which he was held. The funeral took place in Allegheny City, Pa., on Aug. 11.

POINTERS FOR SMALL PACKERS.

The strike at Chicago has demonstrated, amongst other matters, the fact the independent and smaller packinghouses are sadly short of chilling capacity—they were always short on cold storage—as proven by the condition of the meats received by the retail dealers from them.

This seems to be a weakness with nearly every concern building a plant, either due to the shortsightedness of the architect or the fear of the promoters that they will spend more than absolutely necessary to take care of the product of just so much stock killed to the hog, beef or sheep. As a rule, the killing capacity of nearly every plant is five times that of its chilling and cold storage. It would be interesting to know why this is so, in view of the fact that the shortage has been demonstrated to all of them so frequently.

Again, why do not the smaller packers seriously consider the manipulation of all by-products—go into facts or figures? It would pay them a thousand-fold to put their findings into practice. They are not so badly handicapped as they imagine.

AFTER ADULTERATED DRINKS.

Pure Food Commissioner Warren, of Pennsylvania has taken a new tack, and is now charging full tilt against the purveyors of ice cream, soda water and soft drinks in Philadelphia, whom he accuses of using adulterated flavoring extracts and artificial coloring matter. He is particularly vigorous in his crusade against vendors of the "penny drinks" and cheap beverages. He is also at odds with the local district attorney because he claims that official lets the cases against alleged violators die after they are brought into court.

A DANGEROUS EXPEDIENT.

Fearing a meat famine which was never imminent, the city authorities of Omaha yielded to the importunities of small dealers and others and repealed the ordinance forbidding the slaughter of live stock within the city limits. Objections to this action were made by the big packers and by physicians and others, but the repeal was rushed through before anything could be done to stop it. The result is that the city has gone back to the days of indiscriminate killing and marketing of all kinds of meats, healthy and otherwise, not to speak of the offensive conditions surrounding the killing of animals within the crowded parts of the city.

OLD JEALOUSY RENEWED.

The cattle and sheep men of the West seem to have parted company regarding the methods of securing the legislation which both say is needed to secure equitable freight and shipping rates and the widening of the breach between these two interests was distinctly emphasized at the recent live stock conference in Denver. As a result, the sheep men have declined in every decided language the invitation of the cattlemen to join the latter in the hearing before the Interstate Commerce Commission in Denver next month.

The commission has been invited to hear the complaints of the stock growers regarding rates, and the cattlemen had expected that the sheepmen would be present at this hearing, but the sheepmen will not be there, and will, instead, it is said, appeal directly to Congress for the passage of the pending bill which gives the Interstate Commerce Commission power to enforce its decrees.

Northern Motors in Refrigerating Work

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Northern Spherical Motors in Refrigerating Plant.

WILEY'S COLD STORAGE TESTS

The investigation of cold storage methods and the effects of refrigeration on foods and food products, undertaken by the United States Department of Agriculture as the result of a Senate resolution, will shortly commence under the direction of the Bureau of Chemistry. Dr. Wiley is getting ready to recruit what is facetiously called another "poison squad," on whose members he will test the effects of cold storage food. Dr. Wiley found it difficult to conform theory to practice in his recent preservative tests, and he is likely to run up against even more difficulty in getting practical results from the forthcoming experiments.

The cold storage experiment is one that presents possibly more difficulty than those which have preceded it. Twelve young men, most of them college graduates—athletic, healthy and studious—will form the class that is to sit at the hygienic table to be maintained in the chemical laboratory of the department. Each person takes an obligation to obey on honor the rules laid down for the experiment and not to eat any food but that provided in the experiment, and not to drink water without reporting the amount. The agreement also absolves the Government from any responsibility for sickness or other evil consequences to follow as a result of the experiment.

In the tests as to boracic preservatives in food the borax was administered in capsules, the quantity being varied and increased to suit the premises of the experiment from day to day. The amounts of borax were made to correspond to the amounts found by chemical analysis to be contained in the foods under test, this being the department's idea of a practical test.

With foods preserved in cold storage the capsule is out of the question. The appetite will enter as a most important factor governing the amount of food taken into the system, and thus influencing the effect on the health. As far as possible artificial foods will be eliminated; for instance, butter is supplied free from coloring matter and from salt. Experts will examine the milk and cream used, and it must contain no preservatives of any kind. Vegetables are those of the season or those kept in cold storage. Fruits must be those of the season or those preserved without antiseptics. Cold storage

beef, chickens, ducks, turkeys, broilers, eggs, fish, oysters, clams, fruit and vegetables of all kinds will be on the bill of fare.

These articles will be kept in a cold storage plant to be provided in Washington, although arrangements have been considered for cold storage of foods in New York and Philadelphia. Foods from various parts of the country will be tested. Chicago's food industries will be especially studied in the course of the tests, and some determinations made as to the character of cold storage products that have to be kept in transit several days before reaching the consumer.

A search will be made for beef and poultry that has been kept in cold storage for an unprecedented length of time, if there is such to be found, which is doubtful. Practical jokers have informed the department that there is a turkey in Washington that has been on ice for nine years, and Dr. Wiley is negotiating for it, and will serve it to his class if its purchase does not make too large inroads in his appropriation.

During the tests fresh foods will be served, and then the same foods will be put away in cold storage and kept for different periods before serving again. For instance, a quarter of beef will furnish steaks at the beginning of the month, and then be kept until thirty or sixty days or a year later and then tried. Expert chemists will pass on every morsel of food consumed by the class. Dr. Geddings, of the Public Health Service, will be in attendance on the class from day to day. Experts in blood examinations will be employed, and chemical analysis will be applied to every phase of effect of the foods used on the systems of the young men. This involves an interminable amount of work.

One of the interesting features of the tests will be the requirement from each member of the class that he should describe the taste of the foods taken, and he will be urged to eat heartily as an unsuspecting consumer of such foods would in the ordinary conditions of life. Dr. Wiley is at work on the detailed plan of the whole experiment, and will submit it to Secretary Wilson in a few days.

See page 48 for bargains in equipment or a chance for a good investment.

THE HOG LIVER PROBLEM.

The liver proposition is a serious one at times with the packer. Calves' livers can be sold at once. Beef livers go pretty well. Sheep livers usually supply the lack of calf livers. But hog livers are a bane. The animal taste or smell in them is so great that no boiling or treatment of them would eliminate this objectionable feature. Some of them are used in an admixture for strong wursts or other products, but only a small percentage of hog livers get further than the fertilizer vat.

This is a serious item when it is remembered that 36,000,000 hogs are killed at centers annually. These livers weigh on an average of 1½ lbs. each, or about 54,000,000 lbs. for the annual kill. Of these about 20 per cent., or about 11,000,000 lbs. go into trade. The beef liver is worth 6c. per pound wholesale, the sheep liver brings 5c. per pound and the calf liver 12c. If the hog liver sold for as little as 3c. per pound wholesale the 43,000,000 lbs. which now go into the fertilizer vats would be worth nearly \$2,000,000. As it is, they are worth \$16 per ton for fertilizer.

The loss is equal to 6 per cent. on nearly \$34,000,000. The packing house has not yet made the hog liver acceptable to the consumptive trade. It is a heavy factory loss.

DAIRY PRODUCTS IN GERMANY.

One of the effects of the rapid introduction of cream separators and other modern dairy appliances in Germany has been to greatly improve the quality and to increase the consumption of butter, says United States Consul Harris, Mannheim, Germany. Previous to 1895 Germany's exports of butter had exceeded her imports of the same article. In the year named the importation of butter into the Empire exceeded the export by 233 tons. In 1900 the excess of the import over the export had risen to 13,129 tons. The total amount imported in 1903 was 23,388 tons, against 15,800 tons in 1902. The countries sharing chiefly in this trade, each in an increasing degree, from year to year, are (the figures given being for the year 1903): Holland, 7,671 tons; Russia, including Siberia, 7,654 tons; Austria-Hungary, 4,669 tons, and Denmark, 2,340 tons. France and the United States also share in the trade, but not in an important degree and with no marked tendency to increase the amount shipped.

MEAT STRIKE ONLY A PHANTOM

So far as the eating public knows, there is no meat strike. The supply of meat is ample, and it has gone down in price. The packers are putting normal supplies on the market at figures lower than before the strike began. Where retail charges have not diminished it is due either to the necessity or rapacity of the retailer, or to local conditions brought about by public disorder.

The strike exists for the big packers only so far as they require police protection for their workmen and their property. In localities where lawless trades unionism and hoodlumism necessitates the constant vigilance of peace officers, the packers are put to some annoyance. But nowhere are they suffering serious interruption of business or restriction of output. Operations in all affected plants are very close to full capacity, and conditions are more nearly perfect each day.

Only to the idle union workman and his family is the strike a grim reality. Depending upon relief stations for food and clothing, appealing to outside labor organizations for financial aid to pay "strike benefits"—a ghastly misnomer—the striker has begun to realize the consequences of his hot-headedness in precipitating a second walkout. Whatever the merits of the original strike demands, the men lost the sympathy of the public and all right to further consideration from their former employers when they broke the peace agreement and brought on the second strike.

From that moment the packers refused to have anything more to do with the strike leaders or the strikers as an organization. They preferred to risk no more broken agreements. All efforts to bring about a settlement between packers and striking unions have failed. The union leaders saw their cause lost, and made every effort to secure a compromise. They worked beneath the surface, for it would not do to let their men see signs of defeat in their actions. But the packers refused to treat. Attempts by the strike leaders themselves, by allied trades, by outside unions not affected, by the stock raisers, by retailers, and by city and State and arbitration officials all came to nothing.

Attitude of the Packers.

The packers took the position that they had already won the strike, and therefore had nothing upon which to confer. From the beginning they had announced that they would take back any competent union man who applied for work. They made no discrimination because he had been a striker. And they did take back union men by the hundreds. But they would no longer deal with the strike leaders, or with the labor organizations which had signed an arbitration agreement and then violated it before it had been in force a day. That was their position, and that was why attempts to bring together the packers and the strike leaders failed every time they were tried.

Nothing was left the strike bosses but bluff. They put on a bold front, kept declaring the strike won, and circulated daily reports of peace negotiations to hearten their followers. It was a sign of defeat when promise of speedy peace was the only way they could keep their men in line.

And even these rainbows did not suffice. Careful investigation showed that in the hot-bed of the strike, Chicago, over 4,000 union workmen had applied for their old places in the packing houses, and had obtained them, while no one knew how many strikers had sought employment with the packers at plants in other cities, where they would not be recognized. In Kansas City the strike collapsed and a very large proportion of the unionists returned to work. It was the same in other centres, except where the men feared the wrath of their fellow-strikers, in which case they, too, departed for other fields of labor. Meanwhile the packers were weeding out the ranks of their new employees, keeping only the most efficient and adding recruits until they brought their working forces practically to the old standard of efficiency.

Violence a Sign of Defeat.

Violence always marks the decline of a strike. Defeated and disgruntled strikers, many of them foreigners, understanding little of the merits of their struggle, and realizing only their idleness and the destitution of their families, made a good deal of trouble for the packers and the police at some points. Assaults on non-union workmen, destruction of meat in transit, and other more or less serious annoyances were the only sensational features of the week, and these only in a few centres.

At St. Louis and St. Joseph the courts stepped in and the arrest of numbers of strikers on serious charges awed the lawless element. At St. Paul disorder had entirely disappeared. Omaha saw a revival of mob rule for a night, but the sheriff made new efforts and the packers and their workmen were given proper protection. Chicago, always the scene of strike lawlessness, continued to furnish new pages for the police records. But even here the better union element became disgusted and withdrew its support, and though local boycotts made retail meat conditions unpleasant to a degree, the packers increased the effectiveness of their operations daily, and shipped hundreds of cars of meat all over the country.

The precipitation of a second strike among the 3,500 New York unionists was the last card of the leaders. They played it and lost, for at this writing the New York plants are running three-quarters capacity in their killing departments, their by-product plants are all in operation, and they are storing meat in addition to supplying all demands.

This condition was reached after several days of outside lawlessness and attempts to intimidate new men. It required stringent police protection, and the close guarding of every delivery wagon by officers of the law, but it was accomplished. Many of the new employees are boarded and lodged near the plants, where strikers and rioters cannot get at them. This entails expense and inconvenience, but it will continue until the strikers get enough of mob law and New York hoodlums are put under by the police.

Even this disorder has not interfered with operation or deliveries, however. A feature has been the enlistment of dozens of union men from other strike centres, skilled help gladly received by the packers. This New York strike, forced on reluctant workmen

who had no grievance, illustrates the desperate straits of the strike leaders, and is probably the last notable move of a dying struggle.

Arthur Meeker, of Armour & Company, who came from Chicago to look over the Eastern situation, left New York on Tuesday satisfied that the contest was won. His view of the situation was this:

"I have been in New York for a week watching the progress of the strike, and what most appeals to me is the utter absurdity of the situation. In the first place, the only men that are out on strike are the employees of the Schwarzschild & Sulzberger Company, the United Dressed Beef Company and a few sheep butchers of Swift & Co. and Armour & Co., not one of whom had or has a grievance.

"According to our best information, the great majority of the employees of these companies voted against a strike, and the absurdity of the situation is in the fact that they allowed themselves to be put out of work against their own will by a vote of the butchers, drivers and other workmen of the small slaughterhouses in New York, Jersey City, Newark and surrounding cities, who not only did not vote to strike themselves, but temporarily are getting longer hours and more wages by reason of the enforced idleness of the employees of the above named companies.

"That these companies were handicapped in their slaughtering operations for a few days, there is no doubt, but they are well fixed now in all departments, and by the latter part of this week will be slaughtering their normal amounts of cattle in the mean time, they have a large reserve stock in their refrigerators to draw upon, and all of their trade is being supplied as usual.

"The men who have filled the strikers' places have been largely recruited from the ranks of the packinghouse men of the Western cities, who are attracted to New York by the higher rate of wages paid and who, through threats of violence, were unwilling to work in their home cities, where they were known. Only a certain proportion of the strikers can be taken back now, if they apply for work, and each day that they delay the number of vacancies will be less.

"The police of your city deserve a great deal of praise for the manner in which they have maintained order in the slaughtering neighborhood upon First avenue, and the protection they have afforded the delivery vans throughout the entire city. The companies have demonstrated their ability to operate successfully and have taken legal steps to protect themselves against intimidations, threats of boycott and other ineffective and unlawful weapons resorted to by leaders who know that their cause is a hopeless one."

Advises Return to Work.

A striker who realized the situation in which he had been placed by his leaders, but who dared not give his name for fear of retaliation, sent the following letter to the Chicago News:

"It is of paramount importance that this present strife between labor and capital should end peaceably and at once. No tenable reasons for prolonging the fight can be produced, for the direful results, not only to the parties directly involved, but to the public at large, are fearful to contemplate. Being a workingman myself, my sympathy might unconsciously run in that direction, but I wish to be impartial and therefore advocate the rights of both sides as I understand and realize them.

"I am in this strife, not from choice, but through a series of unfavorable circumstances, and I have every reason to believe my condition is neither better nor worse than that of thousands of my fellow workmen. I have been studying this strike and have eventually come to the conclusion that there is only

one way out of it—to go to work as quickly as possible.

"The man who will sit around in idleness without any prospect of attaining the object in view, who will look with indifference on the pleading of a little child crying for bread, who has nothing to offer that can alleviate its hunger—that man has no true conception of the responsibilities of life.

"To the workman the question becomes this: 'Can you or the packer stand this conflict the longer?' There can be only one answer: 'I must resume work or be satisfied with worse conditions.'

"Unionism as applied at the stockyards has most unsatisfactory results for both sides to the controversy, for the packer and for the workman. Men of all degrees of ability are employed, the learned and the illiterate, the skillful and unskilled. For the

packer to hire men at the union's terms is for him almost the same as 'buying a pig in a bag.' One man is worth only \$1.50 a day, while another, doing exactly the same work, is worth \$1.75.

"I believe, in so far as certain grades of work are concerned at least, that it would be better for both sides if no unions existed at the stockyards. In that case a man could get to the front more quickly through his own resources than would be possible when placed in the same scale with a poorer workman. If you know you are a good workman you employer will know it also and will recognize you with fair remuneration. I therefore maintain that a union, as organized in the yards, is a detriment to a good man, while its benefits to the poor workman are insignificant.

"A STRIKER."

SOME WAGE SCALES COMPARED

From the viewpoint of the wage of the Chicago and other meat striking workmen it is interesting to look at the average of the wage scale of other lines of trade.

The unskilled packing house employee earns \$1.70 per day for 10 hours' work, including his lunch hour. That means \$10.20 per week of six days, or \$11.90 per week of seven days. He averages about \$11 per week. The scale was never lower.

Day laborers on the farm get \$1 per day or \$6 per week. Day laborers in other branches of trade get \$1.50 per day or \$9 per week of six days. Unskilled laborers in shoe and leather factories get from \$1 to \$1.50 per day for six days. Clerks—male clerks in stores and unskilled salesmen get \$10 to \$12 per week of six days. The packers and other workmen in stores get from \$7 to \$9 per week and work long hours.

Drivers and deliverers for stores get from \$9 to \$12 per week for long hours and pretty hard work. Entry clerks and that class of clerical labor draw from \$9 to \$12 per week for responsible work which requires much care and skill.

Many city school teachers earn a salary of \$500 per year and are glad of the chance. Regents of country school teachers and preachers earn \$350 per year and seem glad to get it. Their living conditions are cheaper.

In the lumber trade the same scale prevails. Unskilled fellers, raftsmen, sawmill men and loaders in the timber trade get from \$7 to \$10 per week, according to work and location. In a few places under weather and other conditions they get more, but that is not the rule. The shipping trade does not average as well. The wharfmen draw around \$1.50 per day. Farther north the pay is a bit higher, but lower farther south.

Sailors draw \$15 to \$20 per month and their board. This makes an equivalent of \$8 per week for seven days. The unskilled workers in willow and basket factories earn about \$8 per week of six days on the average. The packers in the same trade get \$7 to \$9 per week. The dairy and butter and cheese lines pay about the same for unskilled labor.

Above ground and underground unskilled day laborers draw from \$1 to \$1.75 per day for six days in the week, according to job and locality. The great railroad systems of the country were bedded, graded and built at less than \$10 per week for unskilled labor. The

molasses and sugar refining businesses pay their unskilled labor from \$8 to \$10 per week. Skilled labor draws much more.

Ice cutters and ice house men receive about the same wage as truckmen and excavators. Express parcel handlers and deliverers draw from \$30 to \$45 per month in wages. Hotel waiters get about \$10 per week—less or more according to the tipping bonus of the establishment. The cleaners-up and common workmen about hotels get from \$5 to \$7 per week and their meals. This brings it up to around \$9 and \$10 per week.

Street car conductors get from \$12 to \$15 per week for 10 to 17 hours' labor per day. They work an average of 15 hours per day for \$17 per week. That is an average of 105 hours per week for this class. The cotton and woolen factory operatives of the unskilled class get less than 15c. per hour, and these unskilled workmen must use much skill as the outside world sees things. Sundry other trades and professions pay their unskilled hands less than \$10 per week.

All of these trades and many of the professions that pay less than \$1.50 per day for labor furnish no cheaper living conditions for their help than that enjoyed by the other workers in the industrial hive. In fact, the so-called respectable callings pay less and impose higher living conditions upon that pay than the packinghouse employee finds. The level of wages for unskilled help seems to be

about \$10 per week. That is the traditional wage in this country for a century past.

The packinghouse strike was precipitated by the skilled workers who are earning high wages—many of them \$200 to \$250 per month—on the ground that their unskilled brethren, the common laborers of the packinghouses, were not receiving sufficient pay.

CANADA'S BEEF RINGS.

Canadian farmers in some parts of the Dominion are forming what they call "beef rings"—not trusts, but merely social beef-killing clubs like those which have existed in parts of the Southern States for over a hundred years. The farmers joining go in groups of from 12 to 24 and each kills a beef during the agreed period. Some of them run all the year round.

All assemble at the farm where the beef is killed for that day. The killer fattens his own beef and retains all the by-products of the slaughter. Each gives like parts to those from whom he received them. After the drawing of the slaughter order the participants may swap tickets if they choose. If one kills a heavier or a lighter beef than the party from whom he obtained a cut, the difference is paid for in cash at a previously agreed or an arbitrated price. The cause for the establishment of these rings is the high price of commercial beef in Canada and the difficulty in supplying beef to the rural districts. American farmers find that it is cheaper to sell their cattle at 5 cents per pound live weight and buy the cheaper cuts back in barrelled or mess beef form at 8c. per pound than to kill the stock, lose the by-product and eat the beef at a faster rate than they would if it were bought.

The Southern "beef clubs" were reduced in number by this commercial idea. The Southern farmer gave up the home killing of hogs largely for the same reason. His experience is that he eats twice as much pork from November, when his hog killing begins, to the beginning of May, when his home killed supply is about exhausted, as he does from May to November, when he usually buys dry salt pork and other factory meats. Winter does not account for it.

The simple fact is that the farmer eats because he has not paid for the stuff and has it at hand in apparently a bountiful supply. The meat is thus more expensive to him than the store stuff. To put it another way, it is more profitable for him to sell his hogs and buy his meat than it is to kill the hogs and eat them. He loses so much, too. This also became true of beef killing. The "beef club" has become a memory on that account, except in those remote parts where the meat of commerce cannot go. The Canadians may have the same experience when their cattle and hogs have as good a local market as do live stock in the United States. The cheap stock market over there makes the home club an economical and a necessary institution.

ANOTHER VARIATION.

Mary had a little lamb,
And then the butchers struck;
"Gee!" said Mary, "now I am,
To say the least, in luck."
—Chicago Record-Herald.

THERE IS MONEY

in Packing House Products
if you know *what you have*
to work with and *how to*
work it. You can find this
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Official Chemists to the New York
Produce Exchange

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BELGIANS FIND MEAT HIGH.

Meat is very high in Belgium and has been for some time. The price has been so steep as to induce outside shippers to seek that market. A large shipment was recently made from Argentine to that market. The cargo consisted of beef and mutton sent over in cold storage. Shops for the sale of this stuff were opened in several cities in Belgium.

This trial shipment was disposed of at 7c. to 14c. per pound. Local beef and mutton were, at that time, selling for 12c. to 19c. per pound in the carcass. The Antwerp deliveries are made direct from Argentina and the sales are made in cold storage at the former place. The retail prices are higher. The grade is not as good as the home product, but the lower price induces the trade and the consumers both to take hold.

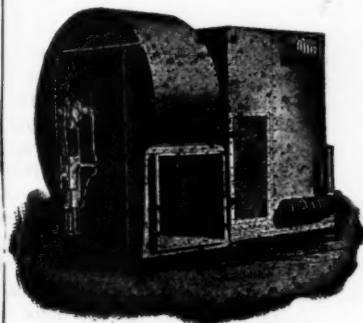
The American trade may thus get a line on the possible price at which South American beef and mutton can be sold in the United States. Mutton now sells here at 8c. and less; beef of that grade at the same price, wholesale. If River Plate carcass stuff cannot be sold at Antwerp in cold storage at less than 7c. to 14c. and the purchaser pays for removal and haulage, it cannot be sold for less here. That price would still be higher than the same grades of American meats bring in the home market.

ENGLAND AS AN OIL RIVAL.

British trade papers are trying to stir up interest in a movement to improve England's oil industry. Whereas now immense quantities of vegetable oils are imported into that country, it is the belief that much of the crushing should be done at home, the raw material being imported merely. They are particularly anxious to compete with American cottonseed oil producers, but acknowledge that thus far no one has been able to turn out as fine a quality of cottonseed oil as that coming from American refineries. There are certain facts in connection with the importation of oils into Great Britain, says the Oil and Colourman's Journal in a recent article on oil importations, which seem to suggest that a further development of the oil-producing industry of the country is possible, and might be profitably undertaken, provided the necessary energy and capital were forthcoming. In the cotton oil imports, which average about 10,000 to 11,000 tons per annum, there seems also to be room for modification in favor of our own crushers. One difficulty here is, perhaps, the failure on the part of British manufacturers to obtain so perfect an edible oil as that produced in America. Many American mills claim to produce an oil from cottonseed which cannot be distinguished from the very finest olive oil, and there is reason to believe that the claim is just. Improvements in our methods, which we cannot suppose to be beyond the reach of British ingenuity, would unquestionably extend the scope of our cotton oil trade, and enable us to capture a share of the American export business. It seems unlikely that Egyptian cottonseed is incapable of giving an oil equal in every respect to that expressed from the best American seed, although it may be true that Indian cottonseed is an unsatisfactory material for the making of the finest oils.

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Philadelphia, London.

FOREIGN MEAT TARIFFS

Compiled by Frank H. Hitchcock, Chief Division of Foreign Markets, U. S. Department of Agriculture.

MEXICO.

TARIFF OF SEPTEMBER, 1902, AMENDED TO FEBRUARY, 1903.

Articles imported.	Foreign denominations.		United States equivalents.	
	Unit of quantity.	Duty. ¹ Pesos.	Unit of quantity.	Duty. ² Dollars.
Meat:				
Fresh, including game and poultry.....	Kilogram (net)	0.08	Pound (net)	0.014
Cured.....				
Smoked or salted, in barrels, casks, etc.....	Kilogram (legal) ³	.12	Pound (legal) ³	.021
Other.....	"	.15	"	.026
Sausage and hams.....	"	.15	"	.026
Meat products:				
Grease, soap stock, tallow, mutton and beef suet, lard oil, etc.....	Kilogram (gross)	.08	Pound (gross)	.014
Lard.....	"	.10	"	.017
Stearine in cakes.....	"	.10	"	.017
Oleomargarine (imitation butter).....	Kilogram (legal) ³	.20	Pound (legal) ³	.034

¹Import duties are levied according to the monthly variation in exchange of Mexican silver on New York, so as to make good any loss to the customs that would be caused by the depreciation of silver.

²Legal weight means the combined weight of the article and its interior packing.

³Note.—All articles are subject to a municipal surtax of 1½ per cent. (decree of June 4, 1896), except at Vera Cruz and Tampico, where they are subject to a municipal surtax of a per cent.

PUDDING IS PREPARED MEAT.

The general appraisers at New York have decided that preserved meat is dutiable at 25 per cent. ad valorem. The decision was made upon a shipment of blood pudding which the importers claimed was dutiable at 20 per cent. as a "non-enumerated manufactured article" under Section 6 of the tariff act. The chemist making the analysis described the substance as "sausage in skins, packed in oil, fat, etc., composed of meat, vegetables, spices, etc." It was taxed under Section 275 of the tariff act, which imposed a duty of 25 per cent. This decision seems to settle the status of all food articles having animal substances in them.

DECLINE IN ENGLISH FARM VALUES.

The excessive importation of food products from foreign countries into England is charged with direct responsibility for a great decrease in the value of farm lands. Recent investigations of values of agricultural lands in Lincolnshire disclose an extraordinary decline, says United States Consul Mahin, Nottingham, England, possibly, however, not typical of all England, for it is believed that

in the county named the depression is particularly acute. It is stated that in some instances persons who a few years ago invested their all in land, and also mortgaged it to raise money to complete the payments, find now on attempting to sell that they can get even the amounts advanced on mortgages.

THE LEHMAN SYSTEM.

The National Provisioner has been familiar with the work of Edwin Lehman Johnson, consulting cottonseed specialist of Memphis, Tenn., for a dozen years, and, believing that he has the good of the entire cottonseed industry at heart, endorses his work and calls attention to his advertisement of the Lehman System of Cottonseed Manufacture, on page 34 of this issue.

HIS REGRET.

Midas found that everything he touched turned to gold, as has already been recorded. "Alas!" he exclaimed, "how much better it would have been if I had asked that everything I touched might accommodate me with a small loan!"—Brooklyn Life.

GERMAN DEFENSE OF BORIC ACID

German sausage manufacturers have taken up the borax investigation report of Chief Chemist Wiley of the United States Department of Agriculture, and are using it as an argument in favor of the practice of meat preservation by boric acid. They see nothing in Dr. Wiley's report to refute the claims that boric acid is a perfectly healthful preservative when used in the quantities now in vogue.

They are making a strenuous effort to have the anti-borax order of the German Imperial Board of Health revoked, so that meat may be properly prepared and preserved. They indorse any regulation which would punish dealers using more than the proper quantity of boric acid, or any other deleterious preservative, and it is evident that the users of acetate of aluminum and other dangerous methods are not among their number.

In a recent petition to the Federal council for the revocation of the anti-borax order, the German Association of Sausage Manufacturers made the following argument:

Petition of the Sausage Makers.

The decision arrived at by the Federal Council on February 18, 1902, in connection with the act of June 3, 1900, to the effect that among other substances boric acid may no longer be used for preserving meat goods and foods generally, has seriously affected the meat and provision trades.

The said trades would have felt bound to submit to the decision had it been proved that boric acid is injurious to health when taken daily in a fixed moderate quantity in food-stuffs treated therewith. Such proof, however, has never been forthcoming. It is simply a question in what degree of concentration, quantity or period a substance is introduced into the system or circulation. Common salt, for example, introduced into the stomach in a certain degree of concentration and dose, may have fatal effects; strong infusions of coffee and tea may sometimes cause serious illness; tobacco may under certain circumstances prove injurious to health; bitter almonds may induce poisoning; and the effects of alcohol are unfortunately only too well known. The list could easily be extended.

All these substances are nevertheless permitted to be freely traded in, although in the case of some of them possible injurious effects are freely admitted. Now, it may be objected that common salt cannot at all be taken in sufficiently concentrated form to be injurious, since taste would be a sure criterion. This may be so in the case of salt, but not in that of some of the other substances named; the question of the effects of accumulation, which for instance, is more or less unanimously admitted to take place in the case of tobacco and alcohol, and also of coffee and tea, remains, however, an open one.

Common salt is probably rightly assumed to have no injurious action through accumulation when continually used, and the same credit must be given to other substances. Among these we include boric acid.

Borax Eaters Not Harmed.

Experiments as to the daily maximum dose as well as in regard to accumulation have

been conducted in the United States of America at the Government laboratory at Washington. Twelve persons of the laboratory staff, who placed themselves there at the disposal of Dr. Wiley for experimental purposes, were fed daily by him with boric food. After experiments extending over six months, they were all in perfect good health and flourishing.

Further, there is an article in the "Klinisch-Therapeutische Wochenschrift," by Dr. Victor Vorhyzek on the value of boric acid in the treatment of scurvy. The author used 6 gr. of boric acid per 24 hours for a fortnight, increasing it, however, up to 100 gr. in 10 days. In none of the fifteen cases thus treated were there any symptoms pointing to poisonous effects. The boric acid was used in a solution of 5 in 200. The dosis toxica was given at 12 gr. per day.

The well-known physicians Rossbach and Nothnagel state that the substance is quite harmless in medicinal doses. Twelve gr. is an immense quantity compared with the modest proportion of 0.2 gr. per kilo which the sausage and provision manufacturer requires in order to make the goods keep a few days longer in a salable condition, or to be able to obtain the raw material in faultless condition. For the honest trader's sole object is to keep the goods fresh and never to conceal or defraud.

In most cases, as already indicated, the addition of 0.2 gr. per kilo suffices for preserving purposes. Now, as it is hardly likely that any one will consume more than 1 kilo of sausage or preserved meat per day, the dose of boric acid which he may thus introduce into his system is so minute that all ground for anxiety disappears.

There consequently disappears also every possible reason for a prohibition of the use of boric acid on sanitary grounds.

Decomposition Not Concealed.

The sole object and purpose of boric acid is therefore to retard for a few days decomposition arising in fresh sausages and meat goods, enhancing the salability of the goods to that extent and ensuring the goods remaining fresh and in faultless condition. The setting in of decomposition is not concealed or averted by the addition of boric acid in the quantity mentioned, but only retarded; indications of decomposition show themselves after that period, it takes place in the goods thus preserved with boric acid so rapidly, that from the first moment of its appearance the goods are plainly recognizable as tainted and are no longer eatable, their taste immediately betraying them.

No one is injured, either in health or otherwise, by the addition of boric acid in the dose named, but honest tradesmen are thereby protected from prejudice, which they now suffer temporarily or permanently where they do not sell their goods immediately.

Substances already infected with germs of decomposition cannot be preserved from going bad by the addition of boric acid in the said dose; for this, very large doses are necessary, the use of which would, of course, be punishable. There are, however, a number of other things by which smell and taste can be concealed, and which are not under any prohibition, such as garlic, which in many

districts and for many kinds of sausages is added as spice to meet the public demand. Even though garlic possesses the double property of serving the honest trader as a spice and of sometimes also giving the dishonest tradesman the opportunity of concealing incipient taint in meat, yet no one ever thinks of excluding it for this reason from being used as food.

Other Ways of Hiding Taint.

There are many more such means of concealing taint in the form of kitchen spices, and their use cannot be interfered with.

Taste or smell cannot, however, be covered by means of boric acid, as it is odorless. It keeps meat fresh for a longer period and cannot save tainted meat, has in no way ever been proved to be injurious, and it is a useful article for the aid and furtherance of honest trade, which would readily agree to all excesses beyond the maximum dose being rigorously proceeded against. A small margin would have to be allowed here in consideration of the fact that raw materials, both animal and vegetable, have by nature a small percentage of boric acid, which in certain cases amounts to as much as 0.017 gr. per kilo; such as, for instance, in fruit, which is so strongly recommended as wholesome. This occurrence is explained by the fact that the ground contains borax, and thus a certain quantity finds its way into the plants growing thereon and into the animals feeding on the latter, in whose flesh traces of it may be found.

It is difficult to understand this dread of preservatives. They are elsewhere added to the milk of infants, not only boric acid, but even formaldehyde.

The St. Louis preservatives have been quite generally used in milk for the last twelve years, and the number of cases of infantile diarrhoea appears to have fallen in an extraordinary degree. The statements of Geheimrat von Behring at the "Verein für Inner Medizin" in Berlin in the winter of 1903, '04, admirably deal with this question. The scientific food chemists have from the outset adopted a most friendly attitude in regard to the use of boric acid.

Thus, for instance, Dr. Hofmann, Chief of the Hygienic Institute of Leipzig University, and royal Saxon medicinal privy councillor, writes in his little work entitled "Die Bedeutung von Fleischnahrung und Fleischkonserven," as follows: "The idea of depreciating the addition of any boric acid whatever as injurious and inadmissible, would be just as perverse and physiologically unfounded as to mete out punishment for the sale of tobacco and alcoholic beverages because these contain injurious and even poisonous substances like alcohol and nicotine. In view of the excellent qualities of boric acid, it is very desirable that the question of the quantity which human beings can take without any disturbance of health for an indefinite period should be submitted to a prompt and careful experimental investigation." And further, when discussing the manufacture of meat powder: "It is, in fact, possible, by the addition of boric acid, to manufacture a preparation possessing equal keeping properties with the well-known egg powders, which latter, in spite of the easily decomposable yolk fats, retain their original flavor and, as I found, contain boric acid."

A Sudden Change of Heart.

The diametrically opposite attitude adopted by this author at the meeting of the Imperial Board of Health Council of October 12, 1901, in regard to this very question is all the more surprising. Experts representing the trade, who were present at that meeting, were left under the impression that the boric acid prohibition issued by the Federal Council is to be traced back to the decision of the said meeting, which, moreover, was attended only by one-third of the members of the Imperial Board of Health and which arrived at this decision after the harshly negative attitude of Dr. Hofmann against the use of boric acid.

Experimental investigations, such as are asked for by Dr. Hofman in his treatise of 1880 are now, as shown above, an accomplished fact, and they have proved the complete harmlessness of boric acid in every respect. They have shown that boric acid, in the minute doses which we would like to see allowed to be added to meat, cannot give rise to any objection and can only be fraught with advantage to the consumer and the removal of injury to the trade:

For all these reasons we beg to petition the Federal Council:

1. That the decision of February 18, 1902, be altered to the effect that boric acid is excluded from the prohibition.
2. That boric acid be permitted to be added to meat goods in the proportion of 0.2 gr. per kilo.
3. That in examining goods for boric acid a margin of 0.015 gr. per kilo be allowed in addition to cover any possible percentage of boric acid naturally inherent to the goods.
4. That the import of foreign meat goods treated with boric acid be permitted under the same conditions.
5. That any excess of the proportion of 0.02 gr., plus 0.015 gr. margin, shall be punishable in the case of home goods, but that foreign goods in which the maximum percentage is exceeded shall not be allowed to enter.

TO FIGHT FOR BORAX.

The next session of the Pennsylvania Legislature will take up the preservative question. The Pennsylvania rail meat dealers insist that the use of a small per cent. of borax upon the fresh meat hanging in the shop or laying on the counters of the market keep the flies away, keeps the air purer and keeps the meat in a better sanitary state.

They claim that housewives and cooks wash their meats well before cooking and that virtually all of the antiseptic is washed off. Even if a preservative were, by the use of large quantities, somewhat harmful, the small quantities used and the washing process renders the use on fresh meats absolutely harmless. They claim that it is far more filthy and unhealthful to have flies swarming all over the meat and letting the air become fouler by the non-use of borax. The local

meat men have sent out a circular letter to the trade, their customers and others. It says, among other things: "It is to our great advantage, as well as to the advantage of the public, that we should use modern preservatives in order that we may be able to keep our meats in the sweetest, cleanest and freshest condition."

The shop man has tried both ways and he knows which method keeps his meats and shop fresher. The meat sellers of Pennsylvania are leaguering together to fight for the right to use these harmless preservatives, which are more harmless than salt. Any intelligent food commissioner must know that. If one began a campaign for the abolition of salt he would be howled down at once, yet salt is more dangerous to the human system than borax. If borax had a saline taste the prejudice against it might relax. The Legislature of the Keystone State will thresh out the preservative question when next in session. This action has been forced by the ceaseless and seemingly senseless activity of the State's food department during this year against healthful as well as harmful preservatives.

ANTIQUATED REFRIGERATION.

In parts of Italy snow is brought in from the mountains by peasants and shipped to the cities, where it is sold for refrigerating purposes. The Prince of Palermo derives his wealth chiefly from this source, as he has a monopoly of the snow fields.

Sterling S. Doughty, for five years manager of Armour & Co.'s Cuban branch, died in Havana on Wednesday from typhoid pneumonia.

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WITH**STRENGTH
DURABILITY
EFFICIENCY**

IN

Ventilating Fans**FANS AND BLOWERS**

For All Purposes

American Blower Company**DETROIT****NEW YORK****CHICAGO****LONDON****TO STAMP OUT FRAUDS.**

The Kansas City Livestock Exchange is determined to wipe out the frauds alleged to have been practiced in the yards there by salesmen and others, over which considerable excitement has been aroused. After expelling several members, the following resolutions were adopted:

Whereas, The Kansas City Live Stock Exchange has recently learned that systematic fraud has been practiced at the Kansas City stock yards in the weighing of stockers and feeders, as a result of collusion between certain dishonest speculators and certain weigh-masters at the different scales; and

Whereas, One of the main objects and purposes of the Kansas City Live Stock Exchange is "to promote and protect all interests concerned in the purchase and sale of live stock at the Kansas City stock yards," as well as "to inculcate and enforce correct and high moral principles in the transaction of business"; and

Whereas, Such dishonest and fraudulent practices tend to bring into disrepute the entire live stock trade at this market unless promptly suppressed and the guilty parties properly and promptly punished; now, therefore be it

Resolved, That the Kansas City Live Stock Exchange will do all in its power to aid and assist in stamping out all such dishonest and fraudulent practices and to drive from these yards all who are concerned as principals in such transactions and will further use every means to see that proper punishment is meted out to all guilty parties.

IT'S AN ILL-WIND, ETC.

Frayed Foote—There's one good thing about this "Packingtown" strike.

Plodding Pete—Wot's dat?

Frayed Foote—It's making soap scarce an' high priced.

**See Page 48 for
Wanted and For Sale Advertisements**

TRADE GLEANINGS

Middlesex Grocery Co., with \$10,000 has been incorporated in Jersey City, N. J., by Charles H. Joyce, Thos. F. Duffy and Francis Darley, to deal in groceries and provisions.

Charles H. Joyce Grocery Co., of Hoboken, N. J., has been chartered with \$40,000 capital, to deal in groceries and provisions, by Charles H. Joyce, Joseph Burns and Thos. F. Duffy.

The Newton Beef Co., of Detroit, Mich., is enlarging and improving its plant. A sanitary rendering plant has been installed.

Capital City Produce Co., of Columbus, O., has been incorporated to deal in farm products and home dressed meats. Capital, \$25,000. Incorporators, Jesse Miller, O. T. Lilly, Charles E. Davis, A. M. Graff, and William Boeshans.

The city of Plano, Ill., has offered to give fifteen acres of land to the Binder Packing Co., of Aurora, Ill., to build its new plant there. Plans are made calling for a 96 by 136 ft. building of cement and stone for the abattoir, which will be built first. It will have a capacity for dressing 50 cattle and 200 hogs per day.

The Independent Cotton Oil Co., of Darlington, S. C., will build a large warehouse for cotton seed at Augusta, Ga. Crawford & Co. will have charge.

The Union Leather Co., of Canada, has been organized at Kittery, Me., to manufacture leather working machinery. Capital, \$50,000. Incorporators, Herman R. Paul, of Kittery, and Jesse E. Forsyth, of Kittery.

The Nashville Packing Company, owned by John Cudahy, of Chicago, Ill., will be sold shortly to the Nashville Union Stock Yards, which will operate the plant.

The Dahn slaughterhouses and packing plant at Columbus, Ind., were burned August 10. Loss, \$5,000. Cause unknown. The plant was outside of fire limits and was totally destroyed.

The Kentucky Refining Co., of Louisville, Ky., has bought the Lever Bros., Ltd., cottonseed oil mills and refinery at Vicksburg, Miss., for \$115,000.

Ben H. Harvin, of Clarendon County, S. C., is reported as being interested in promoting a \$40,000 cottonseed oil company at Sumter.

The Daingerfield Cotton Oil and Manufacturing Company, of Daingerfield, Tex., is planning to put in a fertilizer plant in connection with its oil mill.

The Pacific States Packing Company has been organized by a number of capitalists of Portland, Ore., and from the East. The new company is the outcome of the consolidation of the Northwest Meat Company and the Portland Packing Company, which also embraces the Zimmerman Packing Company. The officers recently elected are: J. H. Cook, president; T. W. Bigger, secretary and treasurer; J. M. Neal, vice-president and manager; Edward Cookingham and A. W. Cook, directors. The capital is \$50,000.

H. L. Hembree, J. L. Jacobs and others are forming a company at Altus, Ark., to erect a cottonseed oil mill.

Prosperity Cotton Oil Mill Co., of Prosperity, S. C., will increase its capital stock from \$20,000 to \$30,000.

The Ammonia Soap Powder Company, of Indianapolis, Ind., with a capital of \$75,000, has been incorporated by Russell B. Harrison, Martin B. Chance, Foster C. Shirley, John A. Ross and Olive I. Stanley.

F. H. Hoemel, Frank Van Hoeter and E. E. Merges have organized the Hoemel & Van Hoeter Soap and Soda Company, at Portland, Ore. The capital is \$10,000.

The Northwestern Leather Company, of Sault Ste Marie, Mich., is building a five story addition to its plant.

The Albany Rendering Company, of Albany, N. Y., is reported to have decided to erect a large reduction plant on Van Rensselaer Island.

The Coulbourne Bros. Company, of Baltimore, Md., was incorporated by William T. Coulbourne and Samuel H. Coulbourne, of

STEEL TANKS OF EVERY DESCRIPTION AND ANY CAPACITY



STEEL STORAGE TANKS, CAR TANKS, GRAIN TANKS, TANK CARS, CYLINDER TANKS, PRESSURE TANKS, STEEP TANKS, LARD, SOAP AND REFINING KETTLES, RENDERING TANKS, STILLs, BOXES, PANS, SHELLS, STACKS, BLOW CASES, RIVETED PIPE, GENERAL PLATE WORK.

WM. GRAVER TANK WORKS

CHICAGO
77 Jackson Boulevard
Rooms 1409-10-11

Lancaster county, Virginia, and R. Weldon Howeth, William J. Whittington and T. Erton Coulbourne, of Baltimore, for the purpose of engaging in the wholesale and retail oyster, fish, fruit, vegetable and general merchandise business. The company is to have an authorized capital of \$20,000.

Work on the three-story office building at the Cudahy Packing Co.'s plant, at Wichita, Kan., is proceeding rapidly. The building will cost \$30,000, and \$10,000 additional will be spent for fixtures, machinery, etc., in the new plant.

American Water Purifying Company, of Philadelphia, Pa., has been incorporated in New Jersey, with \$1,000,000 capital, for the purpose of supplying pure water to municipalities and manufacturing plants.

The United Leather Co., has been incorporated at Wilmington, Del., with \$100,000 capital.

The New England Food Co., of Norwalk, Conn., has been chartered with \$100,000 capital by Thomas E. Stearns, of Westfield; W. H. O'Hara, of Darien, and John H. Light, of South Norwalk.

Harry S. Stone Company, of Hyde Park, Mass., has been organized to deal in provisions. The capital is \$10,000, and Harry S. Stone is president and treasurer.

Fox River Valley Soap Company, of Green Bay, Wis., has been chartered. The capital is \$50,000, and the officers: President, Henry Larsen; vice-president and treasurer, C. W. Streckenback; secretary, H. J. Callaghan.

Edward D. Van Tassel, George H. Shapley and Stephen C. Lowe have incorporated the Van Tassel Leather Company, of Boston, with \$100,000 capital.

The Cambridge Market Company has been formed at Cambridge, Mass., by Burton F. Gardner, James E. Freeman, and Adam R. Powers. The capital is \$3,000.

A dipping plant, to be used in disinfecting Western cattle afflicted with infectious diseases, will soon be completed at the South St. Paul Union stock yards, at St. Paul, Minn.

The Merriam Beef Company, of Du Bois, Pa., has secured additional land along its railroad frontage to provide for enlarging their capacity.

John Ensminger's fertilizer factory at Bindnaugle's Church, near Harrisburg, Pa., was burned recently by an incendiary. Loss, \$2,500.

The butchers of Altoona, Pa., having been required by the Health Board to discontinue the use of the former place of offal disposition, are in a quandary what to do, and have asked the corporation counsel where

they may build a plant to take care of it.

Mr. A. B. Wheeler, president of the Crescent City Slaughter House Company, of New Orleans, La., is visiting in New York.

Chase Bros., of Mercury, Ala., have contracted for the erection of a cold storage plant.

R. M. Martin, of Savannah, Ga., in charge of the Georgia State building at the St. Louis Exposition, states a Western packing company will build a plant to cost \$100,000 at Savannah and establish a 10,000-acre stock farm within easy shipping distance of that city.

Vicksburg Cotton Oil Co., of Vicksburg, Miss., has been incorporated, with \$75,000 capital, to operate a cotton oil mill. The promoters are W. S. Jones, Marye Dabney, H. C. McCabe, J. M. Manire and George Clinton.

W. S. Jones, George Hackett, Daniel Grant, Peter G. Grant and S. M. Neely, of Vicksburg, Miss., have incorporated the Vicksburg Refining Co., to refine cottonseed oil, with \$50,000 capital.

THE

TRADE

CAN ALWAYS

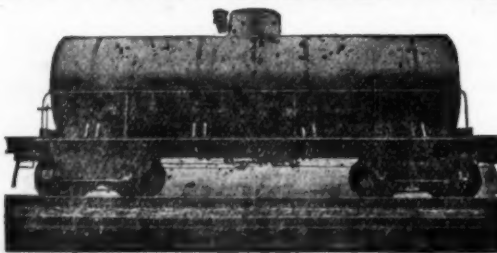
GLEAN

BARGAINS

BY KEEPING AN EYE ON

PAGE 48.

Oil Tanks on Steel or Wooden Cars



Strictly According to Penna. R. R. Requirements.

ANY CAPACITY

ANY PURPOSE

Write Us

Warren City Tank & Boiler Works,

WARREN, O.

JULY EXPORT FIGURES

Following is a summary of the exports of cattle, provisions, etc., for the month of July, 1904, and the seven months ending with July, as compared with the same period in 1903, as shown by the report of the Bureau of Statistics, U. S. Department of Commerce and Labor:

Cattle.—July, 1903, 52,550 head, value \$3,692,926; July, 1904, 43,160 head, value \$2,917,354. For seven months ending July, 1903, 265,634 head, value \$21,174,375; same period, 1904, 315,233 head, value \$24,476,043.

Hogs.—July, 1903, 136 head, value \$850; July, 1904, 139 head, value \$1,089. For seven months ending July, 1903, 2,282, value \$23,474; same period, 1904, 2,536, value \$23,104.

Sheep.—July, 1903, 15,105 head, value \$89,503; July, 1904, 12,202 head, value \$69,812. For seven months ending July, 1903, 107,067 head, value \$655,309; same period, 1904, 212,949 head, value \$1,384,213.

Canned Beef.—July, 1903, 2,927,075 lbs., value \$304,629; July, 1904, 4,033,743 lbs., value \$395,574. For seven months ending July, 1903, 34,985,248 lbs., value \$3,550,165; same period, 1904, 26,812,999 lbs., value \$2,677,305.

Fresh Beef.—July, 1903, 27,276,226 lbs., value \$2,391,524; July, 1904, 11,790,424 lbs., value \$1,183,895. For seven months ending July, 1903, 172,757,376 lbs., value \$15,874,963; same period, 1904, 163,408,646 lbs., value \$14,800,983.

Salted, Pickled and Other Cured Beef.—July, 1903, 5,385,273 lbs., value \$329,753; July, 1904, 4,076,952 lbs., value \$216,488. For seven months ending July, 1903, 34,013,549 lbs., value \$2,325,031; same period, 1904, 32,520,532 lbs., value \$1,798,050.

Tallow.—July, 1903, 7,201,504 lbs., value \$391,896; July, 1904, 5,891,598 lbs., value \$266,689. For seven months ending July, 1903, 25,093,909 lbs., value \$1,420,495; same period, 1904, 37,091,680 lbs., value \$1,777,904.

Bacon.—July, 1903, 15,428,310 lbs., value \$1,572,976; July, 1904, 15,458,746 lbs., value \$1,539,666. For seven months ending July, 1903, 108,875,389 lbs., value \$11,419,284; same period, 1904, 144,781,067 lbs., value \$14,013,858.

Hams.—July, 1903, 19,098,816 lbs., value \$2,255,027; July, 1904, 15,504,793 lbs., value \$1,739,179. For seven months ending July, 1903, 115,383,394 lbs., value \$13,720,075; same

period, 1904, 103,912,620 lbs., value \$11,450,749.

Fresh, Salted and Pickled Pork.—July, 1903, 9,107,045 lbs., value \$907,858; July, 1904, 6,112,084 lbs., value \$494,532. For seven months ending July, 1903, 55,630,441 lbs., value \$5,644,118; same period, 1904, 59,402,879 lbs., value \$4,823,721.

Lard.—July, 1903, 32,787,704 lbs., value \$2,985,475; July, 1904, 31,734,894 lbs., value \$2,420,890. For seven months ending July, 1903, 284,760,343 lbs., value \$28,787,511; same period, 1904, 308,779,933 lbs., value \$24,379,179.

Oleo Oil.—July, 1903, 10,613,497 lbs., value \$904,814; July, 1904, 10,247,701 lbs., value \$767,961. For seven months ending July, 1903, 85,933,322 lbs., value \$7,833,310; same period, 1904, 98,672,620 lbs., value \$7,542,176.

Oleomargarine.—July, 1903, 318,496 lbs., value \$34,215; July, 1904, 658,158 lbs., value \$65,751. For seven months ending July, 1903, 5,115,293 lbs., value \$518,733; same period, 1904, 4,250,264 lbs., value \$413,593.

Butter.—July, 1903, 378,832 lbs., value \$66,699; July, 1904, 555,666 lbs., value \$92,632. For seven months ending July, 1903, 5,256,442 lbs., value \$895,361; same period, 1904, 6,806,086 lbs., value \$1,081,754.

Total cattle, hogs and sheep.—July, 1903, value \$3,783,279; July, 1904, value \$2,988,255. For seven months ending July, 1903, value \$21,853,158; same period, 1904, value \$25,883,360.

Total provisions.—July, 1903, value \$12,388,863; July, 1904, value \$9,256,990. For seven months ending July, 1903, value \$93,417,163; same period, 1904, value \$86,163,267.

EXPORTS OF PROVISIONS


Exports of hog products from Atlantic ports for week ending August 13, with comparative tables:

	PORK, BARRELS.		Nov. 1, 1903.
	Week Aug. 13, 1904.	Week Aug. 15, 1903.	
United Kingdom....	255	421	32,951
Continent.....	500	658	16,967
So. & Cen. Am.....	121	368	15,810
West Indies.....	488	745	50,343
Br. No. Am. Col.....	107	198	8,665
Other countries.....	50	50	1,825
Totals.....	1,471	2,440	126,561

EXPORTS SHOWN BY STEAMERS.

Following were the exports of commodities from New York to various foreign ports for the week ending August 13, 1904, as shown by Lunham & Moore's statement:

Steamers—Destination.	Oil		Beef.—		Lard.—	
	Cake.	Cheese.	Butter.	Tcs.	Pork.	Pkgs.
Umbria, Liverpool.....	530	335	70	...	246	1310
Carpathia, Liverpool.....	...	...	...	...	50	...
Victorian, Liverpool.....	...	951	360	...	...	1600
Baltic, Liverpool.....	329	2198	1723	3	5	4105
St. Paul, Southampton.....	...	1580	5	...	25	50
Minnehaha, London.....	...	30	1362	...	100	3005
Martello, Hull.....	866	1095	738	50	100	3533
Terence, Manchester.....	...	48	...	...	50	2535
Furnessia, Glasgow.....	1474	279	200	40	580	150
Numidian, Glasgow.....	1000	44	25	...	...	...
Pennsylvania, Hamburg.....	...	...	300	235	865	2955
Ryndam, Rotterdam.....	4242	50	...	25	1565	4617
Kroonland, Antwerp.....	6302	700	35	...	50	...
British King, Antwerp.....	2945	50	...	105	150	645
Kaiser Wil. der II, Bremen.....	...	...	...	...	200	...
Grosser Kurfurst, Bremen.....	...	...	...	775	310	4564
Tenedos, Bordeaux.....	...	...	...	...	65	5425
Koenigin Luise, Mediterranean.....	...	110	...	10	20	200
P. de Satriestegui, Mediterranean.....	...	...	...	...	...	...
Sardegna, Mediterranean.....	...	...	...	...	25	...
Tenedos, Mediterranean.....	...	...	6	...	...	...
Peninsular, Lisbon.....	...	...	...	50	...	...
Peninsular, Azores.....	...	...	...	...	...	...
Totals.....	15830	1954	7113	3591	588	34964
Last week.....	22794	819	6043	1223	418	18542
Same time in 1903.....	11470	4607	8257	665	804	37641
Last year, 1,726 tcs. tallow.						



EXPANDED METAL LOCKERS

MADE TO STAND THE RACKET

AN EQUIPMENT OF LOCKERS THAT ARE DURABLE, SANITARY AND THAT PROTECT WILL PAY YOU.

MERRITT & Co.
1009 Ridge Avenue,
Philadelphia,
Pa.

BACON AND HAMS, POUNDS.			
United Kingdom....	10,181,287	11,519,146	415,976,634
Continent.....	328,125	915,650	48,833,869
So. & Cen. Am.....	168,475	237,450	4,475,863
West Indies.....	156,675	519,600	9,910,032
Br. No. Am. Col.....	...	5,250	57,600
Other countries.....	...	131,250	1,476,100
Totals.....	10,834,562	13,328,346	480,730,188

LARD, POUNDS.			
United Kingdom....	2,681,908	3,581,381	204,093,587
Continent.....	3,346,889	6,472,397	221,559,050
So. & Cen. Am.....	387,240	248,395	13,573,502
West Indies.....	370,670	974,395	27,349,430
Br. No. Am. Col.....	...	900	351,780
Other countries.....	172,300	42,899	3,390,465
Totals.....	6,959,007	11,320,358	473,318,714

RECAPITULATION OF WEEK'S EXPORTS.			
From:	Pork, bbls.	Bacon and Hams, lbs.	Lard, lbs.
New York.....	1,309	3,558,050	4,814,730
Boston.....	105	2,871,225	745,100
Portland, Me.....	...	864,150	78,000
Philadelphia.....	13	...	78,212
Baltimore.....	...	33,163	432,801
Galveston.....	...	...	...
St. John, N. B.....	...	3,197,649	172,947
Mobile.....	...	...	...
New Orleans.....	44	10,325	76,380
Montreal.....	...	...	...
Newport News.....	...	...	510,837
Totals.....	1,471	10,834,562	6,957,007

	Nov. 1, 1903.	Nov. 1, 1904.	Increase.
Pork, lbs.....	25,312,200	23,968,800	1,313,400
Bacon & hams, lbs.....	480,730,188	474,153,716	6,576,472
Lard, lbs.....	473,318,714	453,997,411	19,321,303

OCEAN FREIGHTS.

	Liverpool.	Glasgow.	Hamburg.
	Per Ton.	Per Ton.	Per 100
Canned meats.....	7/6	12/6	16c
Oil cake.....	6/6	5/6	12c
Bacon.....	7/6	12/6	16c
Lard, tierces.....	7/6	12/6	16c
Cheese.....	20/	25/	2M
Butter.....	25	30/	2M
Tallow.....	7/6	15/	16c
Beef, per tierce.....	1/6	2/6	16c
Pork, per bbl.....	1/6	2/0	16c

The Wm. B. Pollock Co.
Youngstown, Ohio

Chimneys Dryers

STEEL PLATE CONSTRUCTION

Riveted Pipe Stand Pipes

The Wm. B. Pollock Co.
Youngstown, Ohio

Swift's
Premium
Hams
AND Bacon
Silver Leaf Lard
Swift & Company U.S.A.

A Swift Holiday

Fac-simile of advertisement appearing in the August magazines.

THE National Provisioner NEW YORK and CHICAGO

Published by
THE FOOD TRADE PUBLISHING CO.

(Incorporated Under the Laws of the State of New York.)

DR. J. H. SENNER, . . . President and Editor

GENERAL OFFICES

Floor A, Produce Exchange, New York, N. Y.
Cable Address: "Sampan, New York."

Telephone, No. 5200 Broad.

GEORGE L. MCCARTHY, Business Manager.

WESTERN OFFICES

Chicago, Ill., 17 Exchange Ave., Union Stock Yards.
Telephone: Yards 972.

Subscribers should notify us by letter before their subscriptions expire as to whether they wish to continue for another year, as all subscriptions are entered by us for that period, and we cannot recognize any notice to discontinue except by letter.

Correspondence on all subjects of practical interest to our readers is cordially invited.

Money due THE NATIONAL PROVISIONER should be paid direct to the General Office.

TERMS OF SUBSCRIPTION INVARIABLY IN ADVANCE, POSTAGE PREPAID:

United States and Canada, excepting New	
Foundland	\$3.00
All Foreign Countries in the Postal Union,	
per year (21s.) (21m.) (26fr.)	5.00
Single or Extra Copies, each . . . . .	.10

MISTAKEN STORAGE IDEA

People have a mistaken idea about storage. The popular belief is that if one cannot sell perishable goods he puts them in cold storage, either to wait for a better price or to force a better price for the stuff. This assumption is based upon an immense amount of ignorance of the situation. To stop the consumption of food is bad in itself. To attempt it by the mere withdrawal of fresh supplies from the market with which to choke cold storage would be the height of folly and an impossible act. To do this the food man would have to choke off the source of supply as well as the sale end. He would have to control the livestock growers and shippers to keep stock from coming, or he would have to control the railroads absolutely to block haulage, or he would have to control every other factory and abattoir permit in the country in addition to his own. That is what he would have to do to block the source of supply.

At the storage end of the game he would have to own or control all the space to keep the other fellow from using it. Whether he operated the cold air plants or not, the cost would remain. As a storer his products must pay and carry this cost, which is heavy. When those meats come out they must fetch

at least 25 per cent. more than when they went in. Hence the selling in the first instance at 25 per cent. below the market when they went in to storage brings the result out even, with both time and worry saved. When meats have once passed from cold storage to the air and back from the air to cold storage again they darken on the surface and become less salable in the market. That loss must also be met and that disadvantage.

A big New York butcher found out some of these things two years ago. He bought a large consignment of beef cheap from the packers. The market was gorged. He paid about 7½c. per pound for it by the car load. He stored it for a year for a better market. When he took the meat out the charges and loss of interest on his money brought the meat up to 9½c. per pound. It was darkened by previous contact with the air. He got just over 8c. per pound for his stuff. It would have paid him better to have sold the meat at the time for 6½c. per pound, even though a loss.

These features the layman forgets when he talks about relieving the market by clogging cold storage. This stuff must come again for sale, if stored. Cold storage keeps food from perishing, but it is a poor bull of prices for seasonable products, and meats are always seasonable.

FOOD NOT DETAINED

The present sampling of foreign foods by the Department of Agriculture for analysis should be satisfactory. The exigencies of the occasion, as they arose, have been met by Secretary Wilson in the most friendly spirit. The sampling of products without detention should be especially pleasing. The results of the examinations of the samples taken have no effect upon the right of the consignees to retain and dispose of the particular shipments so sampled. All merchandise released under instructions to sample but not to detain is to be released unconditionally.

This arrangement permits of the possible shipment to us of one cargo of illegal goods, but the imposition stops there. It also enables European exporters to the American market to forward their goods with the assurance that they will not be held up at this end by unnecessary delay pending a determination of their legal status. In this respect we set Germany a commendable example.

COTTON OIL'S DUMPS

Cottonseed oil has not felt the new life which has recently touched up some of its competitors. Substitutes still depress the cottonseed oil market abroad. This somnolent state is intensified by the general slack state

of the foreign industrial and consumptive trade. The demand from that quarter is slow. The trade here is fairly brisk considering the general state of manufactures and distribution. The compound lard trade has no heart and there seems to be little ground for real hope of a better outlook for a time. Lard and stearine have favor and always seem to feel the turn of the market first. Cottonseed oil finds no new outlets, while new oils arise to compete with it.

MIKADO OUR CUSTOMER

Japan's greater commercial importance means more trade for the United States. As it is, we have been increasing our commerce in that quarter. In 1890 our exports to Japan amounted to \$3,000,000, and to \$31,000,000 ten years later. Last year, however, the lists had shrunk back to \$23,000,000. Japan's trade with British India had grown from \$25,000,000 in 1902 to \$35,000,000 in 1903. That with Germany, France, Great Britain and China remained stationary. This country was the second best customer of the Japs, and that country bought most of us, after India. There is a field in the Mikado's kingdom for American food products of the cheaper kind. This will be especially so after the end of the present war.

DISEASED ICE

The sanitary state of refrigerating ice is an important matter where it comes in close contact with fresh meats. There is a disposition constantly to the fore to analyze ice. If river ice is not pure it might be said that the water upon which it freezes is not proper for human use. Some active interest is being taken in Milwaukee in regard to the analyzing of ice. The City Council has the matter of tests before it. Microbes and germs are kept, but not killed by ice. Just how dangerous natural ice is in the food economy remains to be seen. The scientists are working on phases of the subject, with no prospect of its immediate solution.

MORE TINNED FOODS

The popularity of canned goods is attested by the fact that canning and can-making factories are multiplying all over this country. The consumption of canned goods is greatly increasing. The United States uses more than one-half of the cans that are made in the world and eats nearly one-half of the canned stuffs turned out. It is a convenient product and the factory has become so skilled that we have the garden, the orchard, the field and the abattoir in our kitchen all the year round. It is said that Floridians eat more canned than they grow of fresh stuff. The field for the conserved product is fast enlarging.

TECHNICAL AND SCIENTIFIC

TO SET HORIZONTAL STEAM BOILER.

The established rule or custom is to give the boiler an incline of one-half of one inch toward the "blow-off" cock. This permits of completely emptying the boiler when blowing off steam for the purpose of internal cleaning.—Blacksmith & Wheelwright.

PRESERVING MEAT BY ELECTRICITY.

Augustus W. Ball, of Richmond, Va., has devised a process for preserving meats by electricity which he contends will be an improvement on the methods now in vogue, both as to cheapness and quickness. This man's scheme consists in employing an electric current to uniformly and more thoroughly deposit the preserving fluid throughout the meat. The meat is suspended on a removable rod, the latter being forced through the center of the meat for about three-quarters of its length, and the whole fully immersed in the fluid. It is evident that the positive electric current would be compelled to pass through the meat before reaching the negative rod, and in so doing would carry some of the fluid with it, thus, it is claimed, preserving the article equally in all parts, as the current would pass through the meat and not around it, as in other processes.

PICKLING TONGUES.

Beef, hog or calf tongues intended for pickling are first carefully freed from all of the adhering meat, and the former soaked in cold water for 24 hours, while hog and calf tongues require but about 12 hours of soaking. The tongues are next drained and dried with clean muslin. Small cuts are made into the sides of the beef tongues to facilitate the entrance of the pickle. A mixture is prepared in the proportion of 7 lbs. of salt, 1 lb. of sugar, and $\frac{1}{4}$ lb. of saltpeter, and the dried tongues thoroughly rubbed with the same. Fourteen days to three weeks is the usual length of time required for a satisfactory penetration of the pickling mixture into the tongues. Calf and hog tongues thus prepared may be used in the manufacture of sausage, while the beef tongues are generally sold in the whole state, either boiled afterwards or smoked.

The smoking of a beef tongue requires from 3 to 4 days, according to the size of the tongue, while a cooking of from 5 to 6 hours, according to the age of the animal furnishing it, suffices in most cases.

CONCENTRATED BOUILLON.

Fifty pounds of beef are placed in a kettle of convenient size, with an equal number of quarts of water. A mixture of condiments, the composition of which follows, is placed into a muslin bag, and the latter also placed into the kettle and brought to a boil. After four hours' of boiling, the meat is freed of the bones and returned into the boiling broth, while the bones are discarded. After one and one-half hours further boiling the substance will have acquired the consistency of a thin paste. One half pound of rock candy is next dissolved in the hot broth, the purpose of which is the preservation of the bouillon.

After reducing or increasing, as the case may be, the bouillon to a measure of 22 quarts, a highly concentrated and very nourishing product is obtained, which contains all the soluble matter of the meat taken, as well as most of its fibrin. The condiments are: Thyme, laurel leaves, nutmeg, cloves, pepper, cinnamon or ginger, and about 20 pounds of fresh vegetables, which latter may contain carrots, parsnips and the like, according to trade and custom.

VALUE OF CHEMICAL KNOWLEDGE.

It has often been stated, and not without reason, that the boiling of soap, taken by itself and regarded from a chemical view point is a very simple process, says a writer in a German soap magazine, but despite this fact a certain amount of technical knowledge and experience is necessary for the practical soap maker. While a properly trained chemist may be able to carry out processes of saponification in his laboratory and obtain the products thereof, he would need a course in practice, more or less extended, to fill a position as a soap maker. There can be no doubt that a practical soap maker with years of experience, but lacking scientific training, will still be superior to the novice, though the latter may possess the chemical knowledge, for practice cannot be acquired together with theory, and as a matter of fact the factory methods differ in most cases from the course indicated by pure theory.

The fault cannot be laid at the door of science, for science certainly is conducive to excellent results, but when we execute manipulations in practice, on a larger scale, we are confronted with a great many unforeseen accidental deviations from previously established rules. It is then that long practical experience can be put to use. It will stand one in good stead, particularly when there is at the same time the ability to determine by means of scientific knowledge the causes of the difficulties that may occur, because the means and ways of remedying them will be at once indicated thereby, without having recourse to tedious tests and experiments with large quantities.

As a general rule the practical soap maker will always look upon the chemist as a mere theorist, but we must not lose sight of the fact that without his co-operation soap making would not have reached the degree of perfection it can boast of to-day and that a further development of the art without the aid of chemistry and the chemist is well nigh excluded. It is, therefore, in the interest of the soap maker to acquire a good knowledge of the rudimentary principles and laws of chemistry that affect his branch as far as is in his power. We will quote an example:

A quantity of grease is offered by some one to a soap factory and it is to be determined whether the stock contains much water and impurities. It is easy to melt a sample on the waterbath and by means of a graduated glass cylinder a fair estimate of the impurities present is readily obtained. For this test no chemist is required, as any practical soap maker can execute it.

There are, however, offers of other greases, from tanneries, etc. Such fats are almost always dark and of unpleasant odor, nevertheless they may, if correctly treated, be used for certain kinds of soap, for instance, dark rosin soap. Aside from the aforesaid two qualities the greases usually have a good feel and seem dry and firm, and yet upon proper examination an admixture of 50 per cent. or more of lime-soap may be discovered which imparted the hardness to the mass. For the purpose of determining the amount of grease actually present, it is necessary to melt the sample, to decompose it with acid, and dissolve it in ether. The residue left on evaporating must then be weighed to ascertain the total amount of fat. As the average soap maker is not used to this, this test is beyond his ability.

As has often been stated before, in order to determine the yield or the quantity of soap resulting from working up a certain amount of stock, it is by far preferable to determine the amount of fatty acid contained in the soap, rather than to weigh the stock and reweigh the soap obtained.

Young soap makers are often nonplussed by unexpected happenings in the manipulation of their work at the kettle and an understanding of their difficulties is often only reached after years of observation and at the expense of numerous humiliations, as well as sacrifices. Their experience is certainly dearly bought, and this should be sufficient inducement to the young soap maker to familiarize himself with the chemical principles which is necessary for him to know in order to carry on his trade successfully. Here, like everywhere else, knowledge is power.

It is impossible at this early date to form an idea of the large scope which may present itself to the soap maker who acquires more scientific understanding of his trade. There can be no doubt that the methods of soap making at present in use are far from perfect, and that especially with respect to the bleaching and deodorizing of fats we will yet see many improvements.

The reluctance to part with old formulas and recipes and to adopt new up-to-date methods instead of the time-worn ones, is still too strong. Because our forefathers have obtained good-enough results with them and they also in a measure give us what we want, we ought not to stop looking for new processes because frequently the goal can be reached by a far shorter path just as safely, as if we would but try to find it. To be able to do this the soap maker needs better scientific training.

WE MAKE A SPECIALTY OF SAVING BY-PRODUCTS

SWENSON'S Patent Multiple Effects

Rotary Dryers and Other Special Machinery For Tank Water, Glue, Red Extract, Prune, Etc.

AMERICAN FOUNDRY & MACHINERY CO.

944 MONADNOCK BLOCK, CHICAGO

FOR PURCHASING DEPARTMENTS

NORTHERN MOTORS AND VENTILATORS.

Leaflet No. 131, which is being sent out by the Northern Electrical Manufacturing Company, of Madison, Wis., is devoted to the subject of ventilation. It illustrates fans and blowers of several designs operated by the motors made by the company, and which are well calculated to operate effectively at small cost in money and with almost no attention beyond proper oiling and occasional inspection.

FOOS GAS ENGINE BULLETINS.

To supplement its regular catalogues, the Foos Gas Engine Co., of Springfield, O., is sending to its patrons a series of bulletins, of which a recent one is No. 65, telling in particular some special points of advantage claimed for the Foos engine. These bulletins are of uniform size and are issued from time to time to explain details of structure, care and management of the gas engine, its many uses, its cost of operation and similar points of interest and value to all using small power plants. The bulletin and catalogue will be sent free on request and are well worth having close at hand for reference.

AN INTERESTING REVIEW.

The National Cash Register Company, of Dayton, O., issues from the pen of its secretary, Mr. Alfred A. Thomas, an "educational number" of the N. C. R. News, giving a complete and fluent account of the recent visit of the Mosely Industrial and Educational Commissions to the company's plant and the comments of the various members on the factory in their review and report made upon their return to England. Incorporated in the pamphlet are explanations and comments on the Commissions' reports by officers of the N. C. R. Co. or its department heads. It is a valuable exposition of the familiar work being done by the company for its employees and will be sought by all interested in the problems confronting employers of large numbers of workmen and women.

FRICK MACHINERY AT THE FAIR.

The Frick Company, of Waynesboro, Pa., builders of the "Eclipse" ice-making and refrigerating machinery, Corliss engines and steam boilers, have an elaborate display of their machinery at the World's Fair in section 11 of the Agricultural Palace, at which their patrons, friends and prospective purchasers are especially invited to call. They have a small refrigerating plant in operation on the grounds, and quite a number of various-sized plants operating in the city of St. Louis or immediate vicinity, to any of which their representative in charge, Mr. Jno. C. Emmert, will be pleased to personally direct visitors.

The "Eclipse" machinery has a world wide reputation as being high-grade and strictly first class. An ever and rapidly growing "users' list" is most gratifying to the manufacturers and loudly commends them to the purchasing public.

NEW ECONOMIZER CATALOGUE.

That the B. F. Sturtevant Co., of Boston, who have recently moved to their new office and works at Hyde Park, Mass., are to press the sale of their economizers is evidenced by the new economizer catalogue which they have recently issued. This catalogue contains the details of the Sturtevant Standard and Pony types of economizers in comparison with those of other makes, the advantages, sizes, weights, accessibility, repairing, etc. It also treats of the subject of mechanical draft and natural draft, and is of interest to all steam users. It may be obtained by any one interested in the subject.

PROGRESS IN FANS AND MOTORS.

Attention is called to the very striking illustration of progress made in the line of direct-connected disc fans and motors, the fan being a modification of the well known American Blower Co.'s "A B C" fan, which has been on the market perhaps longer than any other, and is in more general use.

Previous to the working out of this design, the custom has been to attach a motor to the arms of a disc fan, but the excessive



weight of the motor, overhung in this way, has often been an objectionable feature. In this combination the motor is placed on a substantial base, there being no bearings except those in the motor. This makes by far the most rigid form of construction, and at the same time the most compact, the total width of the outfit being no greater than with the overhung type.

The high efficiency of both the "A B C" fan and the Westinghouse motor, together with the fact that the prices charged are low, makes these outfits unusually desirable for cooling and ventilating. Further information can be obtained by addressing the Detroit office of the American Blower Company, or any of its branches.

C. O. BARTLETT & SNOW ORDERS.

The C. O. Bartlett & Snow Company, of Cleveland, O., manufacturers of mill and labor-saving machinery, report the following recent orders:

From the City of Winnipeg, Man., Can., one 4 compartment, direct heat rotary dryer, capacity 100 tons of sand per day.

From Silver Cup Mines, Ltd., Ferguson, B. C., Can., one single cylinder direct heat rotary dryer, using wash heat from ore roasters, capacity 50 tons of slimes per day.

From James Kirk & Co., Chicago, Ill., one steam dryer.

From Washington Carbon Co., Wellsville, W. Va., complete outfit of conveying and elevating machinery.

From Semi-Steel Co., Cleveland, O., elevating and conveying machinery for brick plant at St. Paul, Minn.

CENTURY RUBBER BELT CONVEYOR.

The Jeffrey Manufacturing Company, of Columbus, O., has issued a new catalogue, No. 67 A., devoted to its "Century" rubber belt conveyor. It is a handsome booklet, having many half-tone illustrations showing the conveyors in operation carrying many kinds of material, coal, ores, broken stone, sand, gravel, chemicals, chips, refuse, boxes, barrels, bags, etc. under various conditions in and about buildings and mines, as well as at cars and boats, proving the adaptability of the machinery to any kind of work where any material is to be moved, elevated, lowered or carried from one point to another. Several pages show hand and power rock drills, mine equipment, chains, beltings and self-filling buckets and side dumping cars. The booklet will be of interest to all who have large or small quantities of material to be moved.

MOTOR-DRIVEN AIR COMPRESSORS.

The National Electric Company, of Milwaukee, Wis., has published a bulletin devoted to stationary and portable motor-driven air compressors for continuous and intermittent service, which is of value to users of pneumatic tools and other appliances for the utilization of compressed air. It is a twelve-page circular, well printed in heavy coated paper and containing soft brown ink half-tone illustrations of the compressors and their various parts. Tables showing dimensions, capacities and other data, and diagrams of wiring and piping for connections for continuous and intermittent use are included. This and other bulletins will be sent to inquirers.

See page 48 for bargains in equipment.

**DIXON'S
GRAPHITE
Pipe Joint Compound**

Write for Booklet 88-D and Samples.

JOSEPH DIXON CRUCIBLE CO., JERSEY CITY, N. J.

**Tight Pipe Joints that will
always come apart easily
at any time**



ICE ELEVATING —AND— LOWERING MACHINE

Operated by Horse Power.
Suitable for filling large ice-boxes and for use at Packing Houses.

Readily moved from one door to another.

Write for Catalogue and Price-List, illustrating and describing all modern methods of handling ice.

GIFFORD BROS.
HUDSON, N. Y.

ESTABLISHED 1814

ICE AND REFRIGERATION

NEW CORPORATIONS.

Consumers Ice Company, of Des Moines, Ia., has been organized with \$10,000 capital to deal in ice. The officers are M. J. Brackett, president; E. N. Talley, vice-president; W. E. Kooker, secretary and treasurer.

Jersey City Dairy Company, of Jersey City, N. J., with \$10,000 capital has been chartered by Benjamin T. Post, Wm. F. Midledge and Rachael G. Butler.

Seaside Park Boat Company, of Camden, N. J., has been chartered by Harry McQuilkin, Harris C. Powell and Frank S. Knight, with \$100,000 capital to carry on a cold storage business.

American Plate Ice Construction Company has been incorporated at Camden, N. J., with \$125,000 capital by M. J. Dunn, James S. Dravo and G. C. Hoting.

Crystal Ice and Coal Company, of Elizabeth City, N. C., has been chartered. Capital \$100,000, of which \$40,000 has been paid in. W. J. Woodley is largely interested.

Amite Light and Power Company, of Amite City, La., has been incorporated. Capital, \$30,000. Officers: Dr. C. S. Stewart, president; D. H. Hull, vice-president and manager; F. E. Mayer, secretary and treasurer. It will operate a light and power plant, ice plant, and water works.

Perkins Co-operative Creamery Company, of Perkins Station, Idaho, has been organized with \$5,000 capital, by H. B. Illingsworth, J. H. Roberts, et al.

Pennsylvania Iron Works Operating Company, of Philadelphia, Pa., has been chartered to manufacture ice making machinery and deal in ice plants. The capital is \$200,000. William A. Heywood, John S. Turner and James Devaney, all of Camden, N. J., were the incorporators.

FIRES AND ACCIDENTS.

The ice house of O'Brien Bros., at Watervliet, N. Y., leased by Oathout & Taft, was burned August 8 last. The house contained about 1,500 tons of ice. Loss, \$1,500. No insurance. The fire started in a rye field nearby, and spread to the building.

The big creamery at Blairsburg, Ia., owned by Saxer & Co., was burned recently. Cause unknown. Loss, \$5,000. Insurance, \$1,200.

Bonsler & Heffner's ice house at Salford, Pa., were struck by lightning on August 12 last. Loss, \$10,000.

On August 16 fire destroyed the smoke house of the Stanton Cold Storage Company, of Spokane, Wash., and did \$125,000 damage to adjoining buildings. Loss to Stanton Cold Storage Company, \$2,500. Cause unknown.

ICE NOTES.

The Cold Spring Creamery, at Churchville, N. Y., recently burned, is to be rebuilt with all modern machinery, and will be in operation by the middle of September. A cream cooler will be put in.

J. D. Conrow, the former manager of the Knickerbocker Ice Company, at Elgin, Ill., has bought the ice and coal business of Andrew Magnus and the ice trade of W. H. Wilcox, at St. Charles, known as the Independent Ice Company.

The Chicago & Northwestern R. R. has had a new refrigerator car on trial. It is called the "Auto-freezer." Coils of pipe are immersed in tanks of ice and water, and the cold air in the coil forced out by a fan operated by a secret mechanism.

McPherson, Kan., is happy over rumors that a large cold storage plant is to be located there this fall. It is said the plant will be one of a chain of cold stores lately built through the West.

The Consumers' Ice Company, of Jacksonville, Fla., being organized now will have a 100 ton ice making capacity and will burn oil as fuel.

The stockholders of the new Consumers' Ice Company at Pine Bluff, Ark., have re-elected the officers for the ensuing year, as follows: President, John F. Rutherford; vice-president, S. Y. T. Knox; secretary, V. O. Alexander; treasurer, W. D. Hearn; general manager, W. D. Shaefer.

The Pocomoke Ice Company, of Pocomoke City, Md., was sold at public auction to the Remington Machine Company for \$8,200. It will be operated under the management of C. P. Council.

At the annual meeting of the Knickerbocker Ice Company, of Atlantic City, N. J., the following were elected officers: President, W. M. Johnson, Atlantic City; vice-president, Theodore Robinson, Atlantic City; secretary and treasurer, William B. Robinson, of Philadelphia. These three also constitute the Board of Directors of the company.

The meat packing firm of Seltzer Bros., of Pottsville, Pa., has begun the manufacture of ice at its new plant, and will place it upon the market in a few days.

Messrs. Van Dohlen & Patton, of Goliad, Tex., are in the market for an ice making machine.

The Marshall Wholesale Grocery Company, of Marshall, Tex., is erecting a cold storage plant.

E. E. Moon, of Charleston, Mo., will build a ten ton ice plant.

Emery & Co., of Chillicothe, Mo., are interested with several others in places for an ice and cold storage plant.

Charles B. Gilman, of Lexington, Ky., has built a cold storage house for meats and poultry, and will later enlarge it for general storage purposes. It is cooled by the "Cooper" system, using natural ice.

An ice plant with a capacity of twenty-

GIANT INSULATING PAPERS

STANDARD FOR EIGHTEEN YEARS



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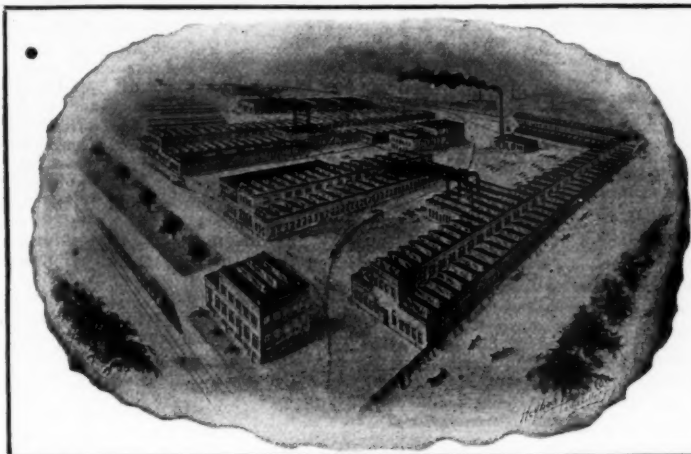
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**ICE and REFRIGER-
ATING MACHINERY**

Louisville, Kentucky.

five tons per day will be built at Cherryvale, Kas., by Messrs. Watkins, Hunter and Hurt.

The North American Storage Company, of New Paynesville, Minn., plans to build a warehouse at Alexandria, Minn., this fall.

An electric light plant and ice factory combined is being promoted at Sealy, Tex.

The Los Angeles Ice Company, of Los Angeles, Calif., has opened a branch office at Santa Ana.

The Pittsfield Electric Company, of Pittsfield, Mass., is considering erecting a large cold storage warehouse.

The Omaha Distilled Water Ice Company, of Omaha, Neb., will increase its capital to \$250,000 and put in a 120 ton ice making plant. A site has been purchased large enough to build a cold storage warehouse later.

The American Refrigerator Transit Company's plant at St. Louis, Mo., which was burned last week is already arranging to rebuild. The insurance covered the loss.

The Sea Shore Ice Company, of Atlantic City, N. J., is enlarging its main building by a brick addition 8 by 12 ft., two stories high.

The Joseph Schlitz Brewing Company, of Milwaukee, Wis., will erect a cold storage plant at Louisville, Ky., at a cost of \$10,000.

Ampel Blackwell, of Joplin, Mo., has purchased A. H. Snyder's stock in the Carthage Ice & Cold Storage Company, at Carthage, Mo., for \$25,000. He has also purchased the Carthage agency for the Anheuser Busch Brewing Company.

John A. Doe, of Omaha, Neb., owner of the South Omaha Coal and Ice Company, the Omaha Distilled Water Ice Company, of Omaha, and the Council Bluffs Coal and Ice Company, of Council Bluffs, Ia., has bought the holdings of David Talbot in the Reservoir Ice Company at Omaha. It is supposed that Mr. Doe will build a large ice making plant and discontinue the natural ice business of the Reservoir Ice Company as soon as possible. Mr. Doe has been elected president of the company. E. W. Lamoreaux, vice-president, and C. C. Hungate, secretary and manager.

ECONOMY IN ICE PLANTS.

By Alfred Siebert.

(From August issue of Cold Storage.)

Before attempting to economize the steam consumption in an ice plant, it should be ascertained that no unnecessary waste of distilled water exists. Five per cent. of the daily output is all that should be wasted and no more. This waste occurs in the reboiler, skimmer, cleaning filters and condensed water cooler and in the thawing tank.

When the plant is so regulated that there is no unnecessary waste, measure the quantity of condensed water not used for filling cans, but make sure that no exhaust escapes

either direct from the pumps or indirectly from the steam condensers. It will pay to save steam when the waste amounts to 15 per cent., but oftener the waste is 50 per cent., and then it pays well to go to a little expense to save 50 per cent. of coal.

A great deal of waste of condensed water can be avoided by regulation of the overflow from reboiler and proper skimming.

The following economies can be obtained:

1. Heating the feed water without expense.

By properly arranging the condensed water cooler we can have feed water at 205 deg. without using a heater or exhaust or live steam. All that is required is a slight change in the connections for the cooling and distilled water, and two separate pans or a partition and additional outlet in the present pan. The cooling water leaves the steam condenser ordinarily at 130 deg., and is used for feed water; by using the condensed water cooler the temperature can be raised to 205 deg. or 65 units be saved, which amounts, expressed in pounds of steam (960 average lat. heat), to 8 per cent. coal saved.

2. Less steam consumption with proper steam engine. If the steam end has a slide valve, an inexpensive automatic cut-off can be attached in a simple manner, decreasing steam and coal consumption from 30 to 45 per cent., according to the space in the slide valve chamber; a piston valve is best adapted. If a square one is on hand, the space in the steam chest must be reduced as much as possible, as steam is cut off above the chest and all clearances below act as dead spaces and reduce the efficiency.

3. Using condensing engines. Every ice plant has a steam condenser of the full capacity, therefore it is easy and inexpensive to make the engine condensing by adding an inexpensive vacuum pump. Of course, the exhaust pipe must be absolutely tight to get a good vacuum. This will save from 25 to 30 per cent. in steam, and if it were possible to make a machine compound in addition, the saving would be 50 per cent., provided the steam pressure is at least 100 pounds; this, of course, is rather expensive, as it means changing of foundation, removal of present cylinder and buying two new ones. In this case the distilled water is only 142 deg., which it should not be when the engine exhausts at atmospheric pressure. However, my experience has shown that the distilled water is no warmer than 142 deg. in plants exhausting at atmospheric pressure, as generally more water is showered over the steam

condensers than is actually required for condensing, and therefore the condensed water is considerably cooled. In such cases it is well to use a heater, which is on hand in most cases, and supply it with steam of as many pumps or auxiliaries as to condense all their steam, the rest to be sent to the steam condenser. Then the condensed water can be sent at about 205 deg. to the reboiler and much live steam saved, which is otherwise used for the reboiler. This will save again

C. B. COMSTOCK Refrigeration Architect & Engineer

Union Stock Yards,
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Specialist in the DESIGNING and BUILDING OF PACKING HOUSES, ICE, POWER and CREAMERY PLANTS. Upon application I will send to prospective builders a partial list of PLANTS I designed.

W. H. BOWER, General Manager. GEORGE R. BOWER, Secretary and Treasurer.

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WASHINGTON, 1227 Pennsylvania Ave., Littlefield, Alvord & Co.

ATLANTA, Century Building, Southern Power Supply Co.

JACKSONVILLE, Atlantic Coast Line Ave., S. E. W. Acosta.

NEW ORLEANS, Magazine & Common Sts., Finlay, Dicks & Co., Ltd.

CINCINNATI, 9 East Pearl St., C. P. Calvert.

CHICAGO, 16 N. Clark St., F. C. Schapper.

MILWAUKEE, 136 W. Water St., Central Warehouse.

KANSAS CITY, 717 Delaware St., O. A. Brown Co.

OMAHA, 1013 Leavenworth St., Wm. M. Bushman.

LIVERPOOL, Adelphi Bank Chambers, Peter R. McQuile & Son.

about 8 per cent., but, of course, will not allow reduction of steam consumption of such pumps by connecting to the vacuum pump, but often it is expensive and inconvenient to connect their exhaust to the condenser, while they are already connected to the heater; then only the water connections have to be changed.

If there is an insufficiency of condensed water, which is the case when high boiler pressure and cut-off engines are used, and especially when power pumps are used, either driven by a "Corliss" engine or by electric motors fed from a dynamo driven by a good cut-off engine, then a live steam evaporator must be used, which will furnish the extra condensed water without more expense than the heating of the feed water for the live steam re-evaporated from 205 deg. to 340 deg., which amounts to about 7 per cent. The re-evaporator gives pound for pound, and as the heat of evaporation at low pressure is lower than at higher, it is evident that no additional heat is needed in the re-evaporator. The same saves also boiler capacity in proportion, and is especially valuable if the boiler capacity is short, or to get one spare boiler for weekly cleaning, which should be done under all circumstances when tasteless ice is wanted. The taste comes only from dirty boilers, as can be observed in an iron pot, wherein water is constantly boiled; a crust of burned lime will soon be formed on the sides, and when water is low it will be burned and cracked, and then when water rises again the water will wash out the burned scale and taste badly, like ammonia, which accounts for the funny taste such water always has. Of course, to use a re-evaporator the steam pressure must be at least twenty pounds higher than the pressure required to drive the engine. Ten pounds are always lost between boiler and engine, and the smallest difference of pressure allowable for the re-evaporator is to be 10 pounds; the higher the difference the better and the cheaper the re-evaporator, as it then requires less heating surface.

In a new plant using compound condensing engine and at least 175 pounds boiler pressure, also compound condensing power engine to drive all auxiliaries, the ton of soft coal, evaporating 6½ pounds of water per pound of coal, can make 12 tons of ice, and with hard coal 18 tons; or, if cold storage is at hand, then instead of using an evaporator, the exhaust from another machine can be used, cooling 10,000 cubic feet of space per ton of ice made, so that there is no expense for the cold storage. This is done in the Mound City Ice and Cold Storage Company, the plant of which I designed and superintended the erection.

4. Using efficient compressors. About 9 per cent. can be saved in steam and consequently coal by injecting liquid during compression in such quantities that about 90 per cent. of the heat generated by compression is removed. While the evaporation of the liquid slightly increases the discharge volume, the cooling effected still reduces the volume about 9 per cent. from that of the volume obtained where no liquid is injected.

This method also insures the admission of the heaviest gas, as the gas must then be saturated; any superheating makes the gas considerably lighter and reduces the amount

of liquid produced therefore, also the amount of refrigerating work. To show the influence we assume that the return gases are in an unprotected pipe along the ceiling of the engine room, where the temperature easily can be 120 deg., the suction pressure being 27 pounds, its temperature 14 deg. Then we find, using the law of permanent gases, that the weight decreases in indirect proportion to the absolute temperature. By adding 400 deg. we get these temperatures and find a loss of weight of 9 per cent. and consequently a loss in refrigeration, as the compressor can only handle a certain volume at a given size and speed, regardless of weight.

This same consideration applies also to the suction pressure; the higher it is, the more work the compressor will do, as the gas is then much heavier, using again the law of permanent gases, stating that the weights increase in direct proportion to the absolute pressure. By adding 15 pounds to them we get the absolute pressure; for instance, comparing 10 and 27 pounds, which latter pressure I advocate as best for cooling rooms to 32 deg. and making ice, we find:

$$\frac{10 + 15}{27 + 15} = \frac{100}{x}$$

$x = 70$ per cent., or we do 70 per cent. more work with a suction pressure of twenty-seven pounds than with ten pounds, and this requires only about 10 per cent. more coal; so it gives a net saving of 60 per cent. on coal.

Another great loss is occasioned by too large clearances between piston and heads and below valves. This clearance can be reduced to almost nothing and the valves made to seat faster by using a by-pass. The whole pressure being removed ¼ inch before the end of the stroke, the valve commences to seat before the end of the seat and moves much faster, because there is about 180 pounds difference above and below, while ordinarily the pressure is equal. After the piston has moved back ¼ inch, the by-pass is closed, and since the clearance is now filled with gas at suction pressure, this gas cannot expand, as it would do when it is under condenser pressure, so the only loss of admission is ¼ inch, or about 2 per cent., against 25 per cent., as found in some cases. Besides, there is no danger of bursting heads; any small particles or liquid will be discharged through the by-pass and go to the suction side. The gas at high pressure discharged into the other side of the compressor does no harm, since it enters only after the compressor has received its full complement of fresh gas, and the little increase of pressure occasioned by it does not affect the power; in fact, reduces it slightly, because the difference in pressure is a little less. Another great advantage can be had when using the by-pass. It is well known that often suction valves, lifting inward, break and smash the compressor, causing great damage to property and life. When the by-pass is used, bridges can be put under the valves, preventing absolutely any breakage and not increasing the clearance to any appreciable extent.

To show what clearance amounts to, we assume that the suction pressure is fifteen pounds and the condensing pressure 200 pounds, and that the actual clearance is 4 per cent. of the cylinder displacement, then

$$\frac{15 + 15}{200 + 15} = \text{about } 7$$

times, before the suction valve can open, or, in other words, the loss of admission is 28 per cent.

FRESH AND COLD STORAGE BUTTER.

Under the influence of the conditions noted in these columns, which continued during last week, the price on creamery extras hardened and the premium of ¼c. to ½c. was paid very freely on Friday and Saturday last. On Monday the official price went to 18c., and has since been held there. The demand for creamery extras continues strong. The speculative element continues to withdraw considerable stock for the coolers, and the market leaders talk conservatism in order to protect the future. These men wish to stimulate the export trade, and as that branch of business is now picking up a bit and considerable shipments could be made at the right figures, it is to be hoped that the speculators will not enter the market so freely as to again stiffen prices and corral all the top grades, and so nip the budding export trade. It is much better for the future, in view of receipts holding up as they do, that surplus should go to the foreign markets rather than the coolers here, to later become a source of danger to the whole trade.

Receipts, August 11 to 17, 69,987 pkgs.; previous six days, 63,095 pkgs. Of last week's receipts, 4,190 pkgs. were for export, and even more is expected to go during the current week. The total for export, May 1 to Aug. 13, was 18,153 pkgs., as against 2,924 pkgs. last year.

Prices remain firm, as follows: Creamery, extras, 18c.; do. firsts, 16½@17½c.; do. seconds, 14@15½c.; do. thirds, 13@13½c.; State dairy, tubs, extras, 17c.; do. firsts, 15@16c.; do. seconds, 14@14½c.; do. thirds, 12@13c.

At Philadelphia the receipts were 9,704 tubs and 6,723 boxes. An oversupply of medium grades of fresh creamery, with the same scarcity of high-grade extras noted last week, followed by stiffening prices, marked the butter situation here. Extras brought 18c., with premiums up to 19c. for high scoring marks. Western creamery extras brought 18½c.; do. extra firsts, 17½@18c.; do. firsts, 16½@17c.; do. seconds, 15@16c.

In Boston's butter market the receipts were 27,586 tubs and 22,436 boxes, a total of 1,592,872 lbs., against 1,792,861 lbs. last week. Cold storage stock advanced 7,851 tubs to 199,631 tubs, which is 68,523 less than in coolers at same date last year. The advance in price, which was anticipated, came with increasing shortness in receipts of extra creamery. The official creamery price was 18½c. on extra, but 18¾@19c. was freely paid. Creamery firsts were firm at 17½@18c.

FRESH AND REFRIGERATOR EGGS.

Larger shipments, induced by the better prices offering for the higher grades, have made the egg market rather unsatisfactory. There has been little chance to move April stock, as cases stored then must bring about 21c., and at that figure they come into competition with fresh gathered and do not go off well. Some May and June stock stored at 17c. and 17½c. has come out, and as a result medium grades in fresh arrivals have tended to drag. There has been no chance yet for refrigerator eggs from interior points, and the outlook does not favor an early start for these. The fancy eggs arriving have been in good demand and cleared up rapidly.

Receipts Aug. 11 to 17, 60,117 cases; previous six days, 58,685 cases. Prices: Nearby fresh gathered, extras, 23c.; do. firsts, 19½@20½c.; Western, fresh gathered, extras, 21c.; do. firsts, 19½@20c.; do. seconds, 17@18½c.; Southern, seconds, 15½@17c.

In Boston no change in market conditions is noted. Fine grades are scarce still and prices firm; Western firsts, 19@20c.; do. extras, 22c.; do. seconds and thirds, 16@18c.; nearby extras, 23@25c.; do. firsts, 20@22c.; fancy Eastern, 26@27c. Receipts, 22,052 cases; last week, 18,065 cases, and same week last year, 21,791 cases.

HIDES AND SKINS.

(Daily Hide and Leather Market.)

Chicago.

PACKER HIDES.—The market is very quiet and few sales are being made. Prices continue barely steady but without any quotable change. Most of the large buyers continue out of the market and are evidently averse to taking strike hides of any kinds. Native steers are quotable at about 12c., with little doing in these. One leading packer has sold a car of St. Joseph June and July previous to strike native steers at 12c., but no other transactions are reported. Old long haired natives are again quiet and no further sales of these have been made. It is estimated that the total slaughter of cattle with the exception of cows is about that of this time a year ago, and as the packers are selling few hides, stocks are accumulating. Texas hides are quiet but unchanged at 13c. for heavy, 12. for light and 11c. for extremes. But brands and Colorados are neglected at present, but are quotably firm at 11½c. Branded cows are held at 10½c., but union crop tanners are not willing to pay this figure and continue to bid only 10¼c. The packers are not making as many branded cows at present as they did a year ago. There is also a falling off in the slaughter of native cows, and though no sales of these have been made, packers are holding firm for both heavy and light weights at 11c. Native bulls are unchanged at 9c. for April to July salting and 8½ to 8¾c. for January, February and March take-off. Branded bulls are in little inquiry and nominal in price at about 8c.

COUNTRY HIDES.—The falling off in the slaughter of packer cows keeps the demand good for country hides, although few sales are being made owing to the difference in views between buyers and sellers of about ¼c. No further sales of buffs have been made at 10c. since the car sold last week at that price, but buyers report that they are securing car lots of buffs from Middle Western points, which are as good as Chicago hides, at 10c. and 9c. Chicago dealers continue to hold their buffs at 10¼c. and 9¼c., but no sales are reported. Heavy cows are unchanged at 10¼c. and 9¼c., without sales. Two cars of extremes, understood not all short haired hides, have been sold at 10¼c. and 9¼c., but best lots of extremes continue to be held at 10½c. and 9½c. Heavy steers continue dull at 10½c. selected. Buyers are not bidding over 8¼c. and 7¼c. for bulls, but dealers are asking various prices, some talking 8½c. flat and others willing to sell at 8½c. selected. There are only light offerings of bulls here or at outside points.

CALFSKINS.—Notwithstanding reported sales in city skins at 14c., the principal buyers continue out of the market at this figure and are not bidding over 13¾c. Some lots of outside city skins could be bought at 13¾c., but the best are held at 14c., and holders are refusing under this price for Chicago cities. Country skins are steady at 13¼c. to 13½c. Present receipt kip are offered at 11½c., while older stock is quotable at 10½c. to 11c. Deacons range at 67½ to 70c. and 87½ to 90c.

SHEEPSKINS.—The market is as firm as ever, with prices differing considerably, according to quality and the demand sufficient to take most of the offerings. Prices on packer lambs range from 90c. to \$1.05 and packer shearlings are quoted at 85 to 90c. Some packer lambs have been sold at \$1, as previously noted, but holders will not accept less than \$1.05 to-day for best lots. The Bridgeport market is strong and active, with lambs bringing 85 to 90c. and shearlings, 75 to 80c. Country skins rule at various prices ranging from 40 to 65c. for shearlings and 50 to 75c. for lambs.

LATER WIRE.—The market shows a firmer tone. One leading packer has sold 1,500 Kansas City strike butt brands and Colorados, partly ahead at the advanced price of 11½c., and another leading packer has sold the same buyer 1,000 strike branded cows of which all are in salt at 10½c. A Chicago country hide dealer has sold a car of choice country extreme cows at 10½c. and more are wanted at this price by Wisconsin tanners.

New York.

DRY HIDES.—The market is stronger, although some varieties have sold at unchanged figures, while others are ¼c. higher. About 3,000 Puerto Cabellos, etc., have been moved at 20½c., an advance of ¼c., and other sales at unchanged prices include 3,600 Bogotas, etc., at 19¾c. for mountains and 3,000 Vera Cruz at 19½c.

CITY SLAUGHTER HIDES.—The market is firm and reports are current that the four cars of August butt brands and Colorados that were offered at 11¼c. by an independent packer have been sold presumably at slightly under this figure.

COUNTRY HIDES AND CALFSKINS.—Buyers continue to talk lower prices, and in some instances are securing lots of hides at under previous asking rates. One car of New England cows has been sold here at 9¾c. flat, which lot was previously held at 10c. flat. One car of State cows is offered at 9¾c. flat and not yet sold. A local buyer claims to have secured a car of Middle West buffs at 10c. selected. Country calfskins rule unchanged at \$1 to \$1.05, \$1.30 to \$1.35 and \$1.60 to \$1.65.

Leather Conditions.

The market continues dull but with prices maintained. Reported sales of Philadelphia belting butts at 37c. are understood to have been of close trimmed stock, as best local tannages have not as yet been sold over 35c. in a wholesale way. Several fair sized sales of New York butts have been made at 35c. for light and 34c. for heavy. The export demand for hemlock sole shows material improvement to-day. Best Philadelphia tannages of Texas oak sides are quoted at 29 to 30c. for X. and some sales are claimed at these rates. Best New York tannages of Texas oak are held at 25c. tannery run, but no sales of car lots have as yet been reported at this price, though some small sales have been made at 27c. for X.

LIVESTOCK PASS RULES.

The Texas Railroad Commission is considering the amendment of the transportation rules of that State regarding the transportation of men in charge of livestock shipments as follows:

1. Pass one man in charge of one car of livestock, except horses and mules; no return pass. Pass one man each way in charge of one car of horses and mules.
2. Pass one man each way in charge of two to twenty-five cars of livestock of all kinds.
3. Pass two men each way in charge of six to ten cars of livestock, all kinds.
4. Pass three men each way in charge of eleven or more cars of livestock, all kinds, which will be the minimum number of men that will be passed with any shipment of livestock from one shipper in the same train.

ANOTHER GOVERNMENT EXPERIMENT.

The Agricultural Department's scientific experiments with kissing bugs, boll weevils, Guatemalan ants and borax have a companion piece in the latest promise held out to the American farmer in the contents of a profusely illustrated publication. Mr. C. P. Hartley has written, and the Government has published, a pamphlet in which the positive statement is made that it is possible to double the average production of corn per acre in the United States within the next few years. This can be accomplished, the report says, without any increase in work or expense. An important economic contingency has been overlooked apparently. Mr. Hartley says it is not to be understood that it is desirable to produce the same yield on a smaller number of acres and with less labor. Selection of good corn and careful, scientific farming are given as the means by which the corn crop of the United States may be doubled. Mr. Hartley does not say what will prevent the farmers of the country, after adopting his method, from doubling the entire corn crop, forcing prices down and thus make corn raising unprofitable.—Washington Post.

INCREASED SALT PRODUCTION.

The output of salt from the big New York State salt fields near Syracuse will be considerably larger than last year. The largest concern mining salt there, which supplies most of the big packing industries of the country, will have an output this year of 2,500,000 bushels. The average for the past five years has been 2,228,000 bushels.

See page 48 for business opportunities and chances to get equipment at a bargain.

CARROLL S. PAGE, HYDE PARK, VT.

Green Calfskins, Country Hides, Sheep
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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the bbls., except lard which is quoted by the cwt., in tcs., pork and beef by the bbl., or tierce, and hogs by the cwt.

Slightly Variable Markets—On the Whole a Better Undertone—Speculation Somewhat Larger but Not General—The Grain Markets Absorb Most Speculative Interest—Consignments of Hog Products Increasing—Cash Demands Improving—Hog Supplies Under Expectations.

There has been a steady getting away from late rutty conditions of trading, although the situation is by no means an active one, as yet.

There has been a little speculative life imparted by the sentiment in the grain markets, yet that the grain speculation is of that radical order that it is taking more of the outside buying orders than usual from the hog products, however that the hog products markets are waking up a little, and are today (Thursday) quite strong at an advance with a larger number of outside buying orders and an improved English demand for lard.

Under the abnormal situations had latterly for the hog products it is hard to get a line on the near future market conditions for them.

The contention in some trade sources is that there is too much property to sell to expect other than irregular, tame conditions as to prices, whatever spasmodic changes to firmer prices happen. On the other hand expectations are of a near revival of more vigorous speculation and stronger prices, and that a firmer tendency will soon be assisted by leading interests in order that a freer, general business may be had, and which more readily comes upon bullish than bearish markets.

It is usual to find a spreading of speculation to products that have been for some time

under neglect when the other important and associated speculative food products have been finding steadily higher prices under excited dealings.

And it is a fact that thus far in the grain speculation that the hog products markets have been little affected, that their prices have moved only slightly stronger at any time; therefore the argument would be that when the situation becomes smoother in the grain speculation that there should be an aroused interest in the hog products and a better line of prices.

There is no question but that the hog products have been ruling for some time upon a very reasonable basis of prices; therefore that it would be easy to advance the markets for them; that it would seem to be impossible to get a material "short" interest in the products because of the generally appreciated situation of the at present easy prices; the reasoning, as well, is that the desire is likely to be for more activity and which only could be had on the "long" side of the market, more especially as the season advances with a view then of putting out more freely the futures, as well as more promptly marketing the cash property.

But a materially firmer course of the market is not counted upon at once, but rather waits for less excited trading in grain, as well as the closer marketing of the withheld supplies of livestock, although at the present writing the tendency is a little stronger.

It is a fact that just now the volume of receipts of hogs at the packing centers is under expectations that had been held, and that the prices of hogs hold up well and indeed that they are closer the prices of the products than in last year at this time; therefore that from the hog situation the products markets should be somewhat better.

There are also delayed demands for the hog products that will have to be satisfied as soon as the hog products markets become situated for general confidence, since the demands for supplies have for some time been of a reserved order on the indisposition of buyers to take hold of them freely until the disturbed conditions of affairs at the packinghouses was straightened out.

And the packinghouses are now substantially back to normal labor conditions, and there is beginning settled conditions of general distributions of supplies and regular trading.

The consignments of meats and lard to Europe are enlarging, and they should soon be quite liberal because of the for several weeks' restricted movements forward to Europe. This will pull materially upon the western stocks of the products which had been accumulating in supply, more particularly of lard in the late unsettled situations of trading.

And the home distributions of meats are now of very fair volume, with good buying interest, especially from the South.

The export demands, however, do not enlarge whatever increase of consignments are taking place.

There has been more of a home business in pure lard; the belief is that the home distributions of lard, either of pure or compounds, must soon materially enlarge because of the long time conservative buying of the lards. But, however better the trading in pure lard is for the present, it is a fact that the compound lard business is as yet very slack, although the compound lard is offered at the late easy prices for it.

Just now the disposition of lard buyers is more to protect some actual need rather than

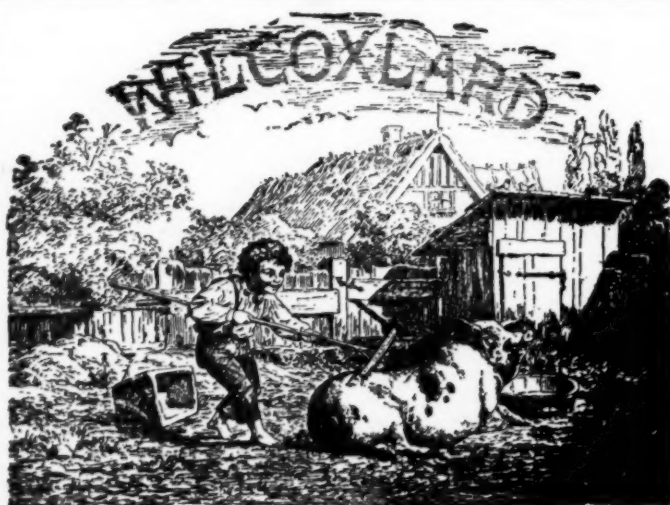
THE W. J. WILCOX

LARD AND REFINING COMPANY

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Refiners of the Celebrated
Wilcox and Globe Brand

PURE
REFINED
LARD



to make material accumulations of the product.

The average weight of the hogs received at Chicago last week was 237 lbs., the heaviest of the year, against 235 lbs. the previous week, 248 lbs. corresponding week in 1903 and 244 lbs. in 1902.

Chicago stocks estimated 48,250 bbls. pork (49,845 bbls. Aug. 1), 144,500 tcs. contract lard (137,860 tcs.) Aug. 1), 21,250,000 lbs. ribs (23,346,000 lbs. Aug. 1).

In New York there is a little export business in pork at easier prices. Sales of 300 bbls. mess at \$13.75@14.25, 250 bbls. short clear at \$14@15, 150 bbls. family at \$15. Lard is still irregular, ranging from about \$6.85 to \$7.15 for western steam. City steam was freely sold last week for export at \$6.50, and 200 tcs. this week at \$6.62½, with \$6.62½ now asked. Compound lard is dull at 5% @ 6c. In city meats there is more of a business in bellies and at steadier prices. Sales of 65,000 lbs. pickled, 14 lbs., 8¼ @ 9c.; 12 lbs., at 9¼c.; 10 lbs., at 9½c.; smoking at 10c.; 3,500 loose pickled shoulders at 6¼ @ 7¼c., and 5,500 loose pickled hams at 10¼ @ 11c.; green hams at 9½c.; green bellies at 9½ @ 9¾c.

Exports for the week from Atlantic ports, 1,471 bbls. pork, 6,959,007 lbs. lard, 10,834,562 lbs. meats; corresponding week last year, 2,440 bbls. pork, 11,320,358 lbs. lard, 13,323,346 lbs. meats.

BEEF.—There is an advance asked all around, with some increase of demand. City extra India mess, tcs., \$15@16.50; barreled mess, \$9; packet, \$10; family, \$11.

PRODUCE EXCHANGE NOTES.

L. W. Haskell (Southern Cotton Oil Co.) was proposed for membership.

Visitors: S. Loers, Cardiff, Eng.; J. C. Vincent, Baltimore; A. E. Nott, Minneapolis; Theo. Nathan, Kansas City; P. F. Block, Montgomery, Ala.; Geo. B. Chamberlain, Weaver Chamberlain, Chicago; A. B. Juqueth, Omaha; Geo. C. Shane, Philadelphia.

SPECIAL ASSOCIATION MEETING.

At a meeting of the Executive Committee of the Texas Cottonseed Crushers' Association, held in Dallas, July 28th, it was decided to call a special meeting of the association between this and September 1st, due notice of which will be given later, to consider the matter of chartering the association, hearing the report of the Committee on Insurance, the action of the Executive Committee in regard to establishing a Bureau of Publicity, and such other matters that may come up for consideration. We earnestly request each member to be present and be prepared to vote on the matters proposed.

J. E. COOPER, President.

ROBERT GIBSON, Secretary.

FOR PREVENTING RUST.

To keep away rust from bright iron or steel when the same is not in use, use either of the following preparations: Dehydrated lard (lard from which all the water has been forced out) three parts, and common whiting one part. Mix thoroughly. Wipe off the bright work thoroughly and perfectly and apply the mixture with a soft brush.

WOOL A PRIZED COMMODITY.

The gradual decrease from year to year in the world's wool supply is having its effect on the wool market. There is a scramble now going on for the new crop and the stocks on hand that is almost unprecedented in the wool business in this country. The domestic wool trade is at its height in the seaboard markets, and an enormous business is being carried on with the manufacturers in the East. From present indications, the year will be an exceptional one in this branch of textile trades, according to a New York market authority. High prices in the West and signs of activity in the East are the features just now. The keen competition of buyers in the West to procure the new clip has made many dealers and manufacturers fairly gasp.

High prices have undoubtedly been paid to the grower—higher than was thought safe by some of the more conservative operators, yet it is contended that conditions warrant the prices that have been paid in most cases, and the advance of 10 per cent. in value during the past few weeks has not only demonstrated the foresight of the wool merchant, but has given him a fair profit as well, in the quick turning over of his purchases. These sales have also cleaned up a large quantity of old material, and the mills that have purchased old wools have astutely placed themselves in a position to let the high-priced new wool remain in the possession of the dealers if business conditions warrant such a course during the remainder of the year.

It cannot be disputed, however, that there has been a large volume of business done in the new clip during the last month. Its extent in millions of pounds can only be surmised, as a great deal of the business has been put through on the quiet, and there have been no records made of the sales. It is estimated that the sales in the New York and Boston markets are running from 15,000,000 to 20,000,000 pounds a week. There is about as much of a scramble for wool at the present time as there has been, and some of those who are so unduly excited are talking strongly of contracting for next year's clip. In fact, it has been predicted by some that by January 1 next fully 75 per cent. of the 1905 clip will have been contracted for by the dealers. How true this may be only time can tell, but such predictions are chronicled to show the strong sentiment that is being expressed in the local market. It is understood, however, that the aggregate business for the period of active buying up to the present time exceeds anything of the kind in the history of the Eastern wool markets.

Of course, such a movement in any other raw material would produce great excitement.

Under similar conditions in the cotton market the staple would advance with a bound, but not so in regard to wool, an advance of 10 per cent. being all that the market will stand. Wool affords little opportunity for manipulation or speculation, because it is not sold in the open market for future delivery. At the same time there is no textile in the world that would so readily lend itself to the control of speculators if the conditions surrounding its merchandising were like those of other staples.

The world's supply of wool is short—some authorities placing the shortage at 300,000,000 pounds. The clip of this country is estimated to be fully 10 per cent. less this year than last, when it was 287,450,000 pounds, and the clip of 1903 was nearly 29,000,000 pounds less than that of 1902. In 1893 the United States produced its largest clip of wool, the amount being 348,538,138 pounds. If it turns out that the clip of this year is approximately 28,000,000 pounds less than that of last year, the total for 1904 will be something like 258,000,000 pounds.

This condition is accentuated by the shortage in the clips of other countries. Australia's clip fell off last year about 100,000 bales, and the South American clip is estimated to show a shortage of 30 per cent. These figures show that the world position of wool is exceedingly strong, and that there will not be sufficient wool to meet the demand of the manufacturers.

GLAZED BUTTER IN GERMANY.

German papers state that it has long been known in Germany that butter can be glazed by the use of sugar; that is, it can be coated with a glass-like sugar covering. This method, says United States Consul-General Richard Guenther, of Frankfurt, seems to become of some importance, as it recently has been used on a large scale in England for butter sold in forms. The Druggists' Journal calls attention to the usefulness of this innovation and says that butter so treated keeps fresh for a longer time than if not treated. It is first carefully kneaded and washed, then put into forms weighing 1 pound each, and placed in a cool room. The glazing is done by painting the surface with a hot sugar solution. The brush used should be very soft and the painting should be done quickly. The sugar solution melts the surface of the butter, and the sugar and melted butter form a sort of varnish which protects the butter against deterioration from outside influences.

See page 48 for Wanted and For Sale Department.

The Stillwell-Provisioner Laboratory
Re-Appointed as Official Chemists
to the New York Produce Exchange

TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The market is passing through a period of inertia, as brought about more from the desire to have settled all around conditions before trading is indulged in in extensive form.

In other words, buyers feel like finding out results of the late labor disturbances, in the modified productions of the tallow rather than submit to some views as to the prices of tallow as held by the melters, more particularly for future deliveries of it, and stimulated in their views by the fact that they are not making burdensome supplies of the tallow, notwithstanding the current quiet demand for the product.

There would be little question but that if there was the ordinary demand for the tallow from the soapmakers that the supplies of it would be found insufficient.

It is only because of the slackness of buying interest that sellers are not able to get better prices than those that prevailed a fortnight since.

The indifference of buyers is permitted through the in some degree substitution of cotton oil for soapmaking, but chiefly because many of the soapmakers are relying upon their old accumulations of the tallow, and in any event would rather wait the offerings of supplies of fall made tallow.

There is a good deal of talk among sellers of better market conditions for tallow when the fall demands open up for it, and they are based upon the late material loss of productions and the prospect of for some time less than ordinary fat collections.

But it is a fact that just now, however firm sellers' views are, that it is not possible to get any better prices for the product than those that have been quoted in our late publications.

Indeed, there is a little effort to sell city hhd. tallow on the basis of late sales, in order to keep the moderate surplus well sold up; yet that there is no disposition to sell future deliveries.

And the quiet feeling among buyers runs over the west, as well as at the east, but where there is, also, a good deal of bullish talk as to the future of the market, however tame demands are at present with the impossibility of getting any more money for supplies than that latterly indicated.

Indeed the beef fat markets are much in the position of those for hog fats, in that the distributing and consuming sources largely rest for definite general situations, and that there is some desire to wait the conditions that will come about after the withheld livestock supplies are better forward and the labor position well settled; and the summer months, as well, usually permit indifference of buyers.

However larger than ordinarily the consumption of cotton oil is by the soapmakers over the country it is conceded that there will be a good deal of tallow needed at the beginning of the fall season, especially because of the long time conservative buying of the soapmakers of the tallow by which held supplies by them are more than usual pulled down, by which resupplying will be necessary.

The strong tone of the foreign markets may not mean export demand, but it would seem as if the near future supplies of tallow would all be needed by home trade sources.

Nevertheless, it is noted that many of the manufacturers do not believe in the market situation, and talk as if they would not think of paying even current prices for material supplies, while it is, a fact, as before noted, that some tallow is being offered in New York on the basis of late sales, and that it cannot be placed.

The London sale on Wednesday showed another advance, this time of 6d. as an average, but where fully 1,125 casks sold out of 1,750 casks offered.

New York City tallow, in hhds., can be had at 4½c., and city, in tierces, would bring 4¼c., and the best bid for city hhds. is 4¾c.

City edible tallow is hard to buy; it is doubtful if it could be had under 5½c., and perhaps 5½c. Sale 200 tes. out of town edible at 5¼c.

Country made tallow is not plenty, and if of fine quality brings strong prices. Sales of 215,000 pounds, in lots, at 4½@4¾c., as to quality, and some very nice at 5c.

The western markets are quoted at about 5¼c. for prime packers and 4¾c. for city renderers.

(Continued on page 42.)

OLEO STEARINE.—The market rests upon the old price of 7c., at which there is occasional demand. The large compound makers

keep out of the market. In fact, the compound lard business is a dull one, and there is no reason for the compound makers to be materially exercised over the offerings of the stearine. The make of the stearine is necessarily moderate, yet it is gaining a little steadily. There are, however, full accumulations of the product at the west, however moderate they are at the east. Sales of 100,000 pounds in New York at 7c., closing with 7c. bid and 7¼c. asked; and moderate sales at Chicago at 7½c.

LARD STEARINE.—The lard refiners are careful buyers of the stearine because of the moderate Continental business in refined lard. Quotations 7½@8¼c.

COTTONSEED STEARINE.—No decided market pending new crop oil.

LARD OIL.—The manufacturers are buying with a good deal of reserve, yet the market prices are fairly well supported. Prime quoted at 59@60c.

GREASE.—The foreign markets are taking moderate quantities of low grades, but there is no marked activity to general trading; prices are held firmly. Yellow quoted at 3¾@4c.; house, 3¾@4½c.; bone, 3¾@4¼c.; B white, 4¾@4¾c.; A white, 5¼c.

GREASE STEARINE.—Offers of supplies are moderate, and there is sufficient demand to keep prices firm. Yellow quoted at 4¾@4¾c., white at 5c.

OLEO OIL.—A strong market with a fair degree of activity. Rotterdam quotes 50 florins. New York choice at 8¾c.; prime at 6¾c.; low grades, 5¾c.

COCOANUT OIL.—A strong market, with steady fair demands from consumers. Ceylon, spot, 6¾@7c.; August to October shipment, 6¾c.; Cochin spot, 7½@7¾c.; August to October shipments, 7¼c.

PALM OIL.—Market well sustained, with rather more of a call for supplies. Lagos quoted 5¼@6c.; commercial do., 5½c.; ordinary red, 5¼c.

CORN OIL.—Held to firm prices; moderately active demands. Quoted at \$3.90@4.05.

NEATSFOOT OIL.—Trading is limited to small lots, and the market is without interesting features; 20 cold test, 94c.; 30 do., at 84c.; 40 do., at 64c.; prime, 50c.; dark, 45@46c.

SOAP MAKERS' MACHINERY

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Prime Green Olive Oil Foots

UNCLE SAM BRAND

QUALITY, THE SUPREME TEST

They cost a little more than ordinary Foots but if you buy "UNCLE SAM BRAND" you will be so pleased with the results that you will forget the price and always remember the quality

Welch, Holme & Clark Co.,

383 WEST STREET
New York City

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mill Superintendents' Association of the United States.

Fitful Situations—A New Record of Firmer Prices of a Slight Order—Increased Offers to Sell at the Advance Largely Speculative Trading and to Cover Short Sales—Export Demand Becoming Narrow by Reason of the Moderately Improved Prices.

While there have been occasional reactions to easier prices through the week for the cotton oil market, yet a new line of stronger prices has been made, although of a restricted order, and as under speculative activity largely, and in good degree through covering "short" sales, although without doubt the recent export business had something to do with the exhibition of firmness, however much modified the export demand has been more recently by reason of the slightly improved prices for the oil. Following the advance of Tuesday on the then active speculative trading there was on Wednesday only a small reaction to easier prices, while the close of Wednesday's trading showed steadiness, yet on Thursday there was slight weakness with dullness and a decline of about $\frac{1}{4}$ c.

As the market in New York drew close to 30c. for prime yellow for the late fall and early winter deliveries, it was observed that there was more oil for sale than the demands could take care of.

There was no Southern demand at the outside prices, except to cover short sales. It did not appear probable that activity would have eventuated had it not been for the "short" interest, however more substance the market has had latterly than before in some time by the takings of supplies by foreign markets, although just now by reason of the stronger prices some subsidence of export demand.

However willing the foreign markets had been to buy the oil when it rested upon a trading basis under 28 $\frac{1}{2}$ c. for prime yellow for the fall deliveries, they are now more careful, although it cannot be said that the export demand has completely disappeared.

There is no question but that the foreign markets regard next season as likely to be a favorable one to them for buying seed and animal fats in this country, unless something unexpected happens to the corn and cotton crops, both of which are now promising better than ordinarily for this advanced period of the season, while that there are indicated large crops of both; therefore it would be im-

probable that foreign markets, at present at least, would extensively buy the cotton oil at any material advance from the basis of late sales, although that they had been willing to buy steadily moderately at the prices only latterly current and to protect some well recognized needs. The belief has been as well on the part of the foreign sources that the new crop season would offer, under any probabilities, only moderately lower prices than those current a week or so since, but that with an advance upon those low figures that there would be reason for more reserve upon their part, although, as before remarked, there is more or less export business steadily going on, however more limited it is. The export demand is shut off from some sources that had been before buying, although it continues from other directions.

But there had been a good deal of the oil sold to the foreigners in the late hovering of prices to an easier basis than the prices that are now quoted, and there is no question but that it has permitted the more recent developments of speculation for better figures, and as well that it frightened some of the shorts into covering, and by which there was the late added firmness to the market.

But it must be considered that when the takings of supplies of the oil are touched upon as a feature that outside of the late export interest and a moderate awakening of home soapmakers' demands that there is a somewhat dragging condition for spot supplies, and that the leading source of home demands, the compound makers, are neglecting the future contract market for the oil as well as the spot supplies of it, and that the compound makers do not appear at all alarmed over the recent manifestations of bullishness in the oil market.

It is true that the compound lard business is very dull and that the compound makers are not urged to buy the oil by the conditions of business in their manufactured goods. Yet the main reason for the inactivity in cotton oil by the compound makers is found in their belief of a large production of cotton oil for the coming season, as in their expectations of a big cotton crop; therefore, there is the supposition on their part of all right (to them) prices, for the oil when they get ready to buy it. And the only development that would change their opinions is what seems now improbable—a badly damaged cotton crop. A large cotton crop seems now assured, however much larger it could be

under more decided conditions. There is no question but there is a little alarm over the cotton crop in some of the Southeast sections, and that Texas has more fear of damage by boll weevil than it has had before in the last ten days, and although a large cotton crop, as before remarked, seems assured, yet it does not follow that some ideas of the cotton crop held a little while since will materialize.

The point, then is, if the export demands should get to a standstill for the oil, by reason of prices being asked for the oil against views of foreign buyers, that with the inactive home compound makers' demands and the moderate interest only of the soapmakers, that there would be little foundation for further sensitive prices for the oil, or at least that there would be lacking the stimulation for the oil market which had seemed latterly to have started some interests to protecting their "short" sales, unless there is a position of the lard market to warrant increased demands of the compound makers for the oil.

And the near future course of both the hog and beef fat markets will be watched with a good deal of interest to see the probabilities of enlarged soapmaking and compound making demands for the oil; the probabilities of the hog fat and beef fat market as they appear to us are referred to further along in this review.

The speculation latterly in the oil had been more in selling on the part of some sources South, especially of crude oil, and which it would seem indicated its views concerning the cotton crop, while it turned here and there only to protecting contracts both of crude and refined, not so much by any adverse reports concerning the cotton crop as perhaps from the influence of the late export business and the fear, possibly, that there would be a disposition on the part of the planters to ask more money for seed than was warranted by the extent of the cotton crop or the prices of the oil, at least for the early part of the season; however that the prices of the seed should settle thereafter to a proper basis with the values of the products if the cotton crop is to prove as large as at present implied of it.

It is because of some apprehension of the beginning of the season's developments that some short sales of crude, as well as of refined, have been protected. Nevertheless, that there are a good many short sales of the crude oil, and as shown by the late ex-

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OF ALL GRADES OF

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A CHOICE WHITE OIL

FOR BAKING, FRYING AND COOKING

hibit of sales, that are left as such, with the belief on the part of the people who have made the sales that there will be no trouble in getting the seed supplies at the right prices for the oil sales; also, that the mills will be actively producing the oil at a sufficiently early period of the season to give an ample supply of the crude at reasonable prices. The sales of crude oil that have been made on speculation for later deliveries than the beginning of the season rest with confidence on the part of their sellers for an abundant offering of seed at easy prices.

The large mills have been selling very little crude oil, and they await the general outcome of prices for the seed before negotiating extensively for the products.

Unless prices of seed are put right for the same trade, expectations of the weak seed products markets as the new crop season is advanced, and as under the present expectations of large cotton and corn crops, there is every probability of continued conservative action of the leading oil producers in buying the seed, and which promoted their interests so well last year, and by which then the leading companies produced much less oil than in the season of 1902 and 1903, and were well situated on oil supplies against the depression which supervened in the oil market in the spring months. There is, of course, always a good deal more in the developments of the cotton oil market than the bearings of the oil supplies themselves, with a large or small cotton crop, or a willingness or unwillingness to sell seed supplies. The corn crop in giving a large or otherwise supply of animal fats has to be reckoned with sooner or later in a season in connection with cotton oil prices. It must be said that up to the present time the indications are for a bumper corn crop, although just now there are some damage reports from one or two of the leading corn-producing States. Expectations are, however, of the corn crop exceeding that of last year, and a yield is counted upon of in the neighborhood of 2,500,000,000 bushels; therefore, there is at present promised a large animal fat supply for next season, although there is, of course, time ahead for the

corn crop, as well as some portion of the cotton crop, to be damaged.

But few of the mills, small or large, have been willing to sell crude oil ahead. Therefore, as we have before implied, the major portion of the business in the crude oil thus far this season has been with a speculative eye, and as discounting possibilities of the cotton crop, seed supplies and oil prices.

But we do not observe any disposition on the part of the South, or for that matter, other sources of demand, to take the "long" side of the market, where there is a desire to speculate at all. But only that buying has been done to cover "short" sales that had been made some time since.

The fact that a little more money was lately made for the crude oil was in line only with the enhanced sentiment of firmness on the refined oil, and which is now disappearing, with, at this writing, crude, in tanks, selling at 22½c. in the Southeast, against a before 23c. price.

The fact that all of the fall deliveries of

the refined oil continued to stand fractionally higher than the August and September deliveries emphasizes the feature of dullness in the compound makers' demands for the oil, and the fact that the business has latterly been essentially in the new crop oil by speculators, and that even exporters have taken more kindly to the later deliveries than those in the near months, even though many of them believe that at some time next season the prices of the oil will be somewhat lower than any of those had in the period of most depression within the last few weeks.

The products markets, which must ultimately have some bearing upon the cotton oil position, look about as follows: The tallow market is at present very dull, with unimportant interest of the soapmakers, who are able to buy at prices no better than those that existed a fortnight since, as at 4½c. for the city tallow in hogsheads and 4¼c. for city renderers in Chicago, and at 5¼c. for prime packers, also at Chicago. But that a stronger market is looked for when the soap-

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Of the Best Quality or the Greatest Quantity as may be preferred,
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PACKERS - SOAP MAKERS -
COTTON SEED OIL REFINERS.

COMPOUND LARD.

DALLAS, TEXAS.

makers are compelled to buy the tallow, particularly next month, and because, not only of the for some time materially modified productions of the tallow, but the steady rise in the European markets for it, with another advance in England this week of 6d. Therefore it is expected that soapmakers' demands will enlarge for cotton oil. The principal consuming sources of Europe are more freely buying the tallow, as influenced partly by the relative strong cost of some other soap-making materials.

The lard market has not become, as yet, positively better; it makes turns to stronger prices and has reactions, and it is clearly, for the present, a manipulated market. There has been no expectation that lard prices would do permanently better until the hog supplies were better forward. But there is a probability of stronger prices for lard in the near future, and notwithstanding the fair stock of it; indeed, it is in part because of the very fair supplies of the lard that a stronger market is indicated, as a better demand is always had for the product on a rising (permanently so) of its prices than with an opposite condition. But there are other considerations for a future firm lard market in that there should be some speculative sympathy with the grain situation; moreover, that if the corn crop is to be a large one, as at present indicated, that intermediately the products markets are likely to be put into shape for more active selling of futures. Besides, after the withheld supplies of hogs are forward it would be hard to understand why the lard market should not take on tone sufficient for freer selling. Moreover, consignments of lard to Europe, which have been narrowed for several weeks, on account of the upset labor situation, should shortly become large enough to pull materially upon the Western stocks. At this writing there is beginning increased English and home trade buying of lard.

The business in cotton oil for the week has been as follows: Toward the close of the previous week in New York 1,600 bbls. prime yellow, September delivery, at 28½¢@28¾¢, and 20 tanks crude in the Southeast at 23¢; and on Saturday on advance to 29½¢. for September delivery in New York, with 1,000

bbls. prime yellow sold at that, with August at 29@29¼; October to January at 29¾@30¢.

On Monday there was a decline of ½ to 1¢. with considerable offering and not much demand, with sales in New York of 100 bbls. prime yellow, September at 29¢; 200 bbls. do., 28¾¢; 200 bbls. October, 29½¢; 200 bbls. do at 29¢; 200 bbls. do at 29@29¼¢; 400 bbls. do at 29@29¼¢; 600 bbls. winter yellow, fall months' deliveries, at 32¢; 400 bbls. white and butter oil, at 31½¢@32¢; early in the day, prime yellow, August, 28½¢@29¢; September, 28½¢@29¢; October, 29@29¼¢; November, 29@29¼¢; December, 29@29¼¢; January, 29@29¼¢, and at the close, August, 28¼¢@29¢; September, 28¼¢@28½¢; October, 28¾¢@29¼¢; November, 28¾¢@29¼¢; December, 28¾¢@29¼¢; January, 28¾¢@29¼¢.

On Tuesday a quick reaction to higher prices, and the decline of the day before fully recovered, with a large trading in late deliveries, chiefly to cover "short" sales. Sales early in the day, 100 bbls. prime yellow, September at 28½¢; 100 bbls. do. October at 29¢; 500 bbls. do. at 29¼¢, and late in the day 700 bbls. September at 28½¢; 100 bbls. do. at 28¾¢; 100 bbls. do at 29¢; 100 bbls. October 29¢; 600 bbls. do. at 29¼¢; 700 bbls. do. at 29½¢; 1,100 bbls. October 1,100 bbls. November, 1,100 bbls. December, 1,100 bbls. January, all at 29¼¢; early prices, August, 28¼¢@29¢; September, 28¼¢@28½¢; October, November, December and January, 28¾¢@29¢, and at the close, August 28¼¢@29¢; September, 28¾¢@29¢; October, 29¾¢@30¢; November, 29¾¢@30¢; December, 29¾¢@30¢; January, 29¾¢@30¢.

On Wednesday there was a slight reaction to easier prices followed by firmness with sales of 30 tanks crude at Southeast mills at 22¾¢, and in New York 300 bbls. prime yellow October at 29½¢; prices early: August, 28@29¢; September, 28¼¢@29¢; October, 29¼¢@29¾¢; November, 29¼¢@29¾¢; December, 29¼¢@29¾¢; January, 29¼¢@29¾¢, and at the close sales 400 bbls. September, 28¾¢; 1,000 bbls. at 29¢, 400 bbls. October, 29½¢; 1,200 bbls. October, November and December (400 bbls. each month) at 29½¢; late prices: August, 28¼¢@29¢; Sep-

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ASPEGREN & CO.,

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NEW YORK,

Commission Merchants

EXPORTERS

Cotton Oil, Tallow
AND GREASES.

tember, 28¾¢@29¢; October, November, December and January, 29½¢@29¾¢.

On Thursday a quiet and easier market; sales, 100 bbls. Dec. at 29½¢; early prices, Aug., 28@29¢; Sept., 28½¢@29¢; Oct., Nov., Dec. and Jan., 29¼¢@29½¢, and at the close, Aug. 28@28¾¢; Sept., 28¼¢@28¾¢; Oct., 29@29¼¢; Nov., Dec. and Jan., 29@29½¢.

(Continued on page 42.)

RESTORED TO MEMBERSHIP.

Secretary Robert Gibson, of the Texas Cottonseed Crushers' Association, has made public the following notice from President Cooper of the association, announcing the restoration to membership of a firm recently expelled for failure to observe the association's arbitration rules:

Georgetown, Tex., Aug. 7, 1904.

The passage of the resolution at the Ft. Worth convention of the Texas Cottonseed Crushers' Association, held July 4 and 5, 1904, referring the controversy between the Ennis Cotton Oil & Ginning Co., of Ennis, Texas, and S. Samuels & Co., of Houston, Texas, to a special committee for consideration and final action, each of the said parties having agreed to the appointment of and to abide by the decision of the committee, carried with it, according to the ruling of the president, the restoration of S. Samuels & Co., to membership in the association.

J. E. COOPER, President.

The Procter & Gamble Co.

Refiners of All Grades of

COTTONSEED OIL

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Boreas, Prime Winter Yellow
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Marigold Cooking Oil
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Office: CINCINNATI, O.
Refinery: IVORYDALE, O.



CHICAGO SECTION



Board of Trade memberships have gone to \$33.50 net to buyer. Five new members were elected by the directors last week.

The Board of Trade wheat bruins have quite as battered an appearance as the old Russian bear after the mauling they got last week. John Inglis is said to be to blame for a good deal of their trouble.

The allied trades passed resolutions last week asking the removal of Edward Tilden, president of Libby, McNeill & Libby, from the Board of Education, of which he is a member. It is needless to add that Mr. Tilden still serves.

Live stock receipts have been well cleaned up all the week by the packers, contrary to statements made by some of the daily papers. They are well supplied with unskilled labor and only need a few more skilled workmen to take care of a normal run of stuff.

It was reported from Boston this week that Mrs. Arthur Meeker had been thrown from her saddle horse while riding near her summer home at Beverly Farms, Mass. She was severely cut and bruised. She was taken to her summer home, and it was announced that no serious results were feared.

It is quite likely many small meat markets will close soon owing to not being able to obtain ice and refusal of the market wagon drivers to haul boycotted packers meats. More rioting has been in evidence since this move. The dear public can stand just about so much of this kind of treatment.

Jas. A. Duggan, of the Davies Warehouse & Supply Co., landed during the past week the next largest order for pipe ever taken in the Stock Yards. The order was for 14 carloads of pipe from one-half to 10 inches for Nelson Morris & Co., Kansas City, the bill amounting to approximately \$15,000. Davies should be able to sprout another hair on the strength of this. Who said there was "nothing doing" in the yards on account of the strike?

T. J. Carroll, of the Bureau of Commerce & Labor, W. E. Skinner, manager of the Chicago Live Stock Exposition, and Mayor Harrison have each been charged with trying to bring about a settlement of the strike, and in turn found guilty. What has become of the reverend gentlemen who were so interested in stock yards' matters some time ago, when there was nothing worth being interested in? Here is a good chance for them to extinguish themselves, too.

The stock market ignores the packing-house strike except as to speculation of the effect on railroad earnings, says the Chicago Chronicle. The reason is that the industries have not been capitalized and over-capitalized and artfully distributed among investors, as other industries have been. An industry owned and controlled in the old-fashioned way, with a normal capital, and a minimum of unsuspecting widows and orphans on its register, will not be shaken to its foundations by a labor quarrel.

Thomas and John Ruddy, of Ruddy Bros., Kansas City, were both in Chicago during the past week, principally to extend their sympathies to the packers, commission men and others here. John says there are worse places than Kansas City and worse catastrophes than the "Kaw" on a rampage. They have shut down their packing house for repairs and are seriously considering raising it up about 20 feet on steel pillars, just to fool the "Kaw," which is expected to go on another "tear" before the winter sets in.

Four ossifers of Inspector Hunt's detail were detailed to patrol "Bubbly Creek," looking for "contraband of strike," or something else, when one of them essayed to do the sea of Galilee act. The creek looked substantial enough to warrant the risk, but the "copper" had been so long away from the old dart and accumulated so much avoirdupois since that he failed in the old bog-trotting knack of by-gone days and slowly sank. Several brother officers who tried to rescue him also became imbedded and the bunch had to be dug out.

A general teamsters' strike, which was avoided by the action of the teamsters' joint council in refusing to further participate in sympathetic strikes, would have involved nearly 17,000 men, divided as follows: Grocery and market wagon drivers, 3,700; ice wagon drivers and helpers, 1,000; milk wagon drivers, 3,200; commission wagon drivers, 900; truck drivers, 5,000; lime, stone and cement drivers, 1,000; railway express drivers and conductors, 1,200; department store wagon drivers, 600; retail furniture store drivers, 300; total, 16,900.

Judge Bradwell will go to St. Louis via the Drainage Canal and Illinois river in his houseboat, "Bubbly Creek Hotel," taking along his family and several friends, among them Col. P. J. Hamler. The boat is fixed up equal to any modern home, every convenience being installed. A tug-boat will accompany the houseboat, and when ready will tow it back to Chicago. The Inter-Ocean

says the St. Louis authorities have been notified so they might not become unduly alarmed, imagining the approaching "layout" to be some new species of Chicago microbe.

It appears that kidnapping is not barred from the book of tactics of the strike leaders. Frank Claxton, head of the striking butchers' commissary department, and J. T. Fitzgerald, labor leader at the stockyards, were arraigned before Justice Quinn at the Hyde Park Police Court Saturday charged with kidnapping Frank Wright, a farmer boy from Scottsburg, Ind., who applied at the stock yards for work.

"We have a clear case against these men," said Captain Clancy. "Wright came to the stockyards in ignorance of the strike, and with only the intention of securing work. These men then hustled him off to labor headquarters, where they kept him prisoner for nine hours and then had him arrested for carrying concealed weapons. This kind of work will not be tolerated by the police, and we propose to show these men something."

A local statistician figures that the butchers' workmen and allied tradesmen in Chicago have lost \$1,100,000 in wages in their strike in the last month. It is generally conceded that Chicago does one-third of the packing business of the country, and at that rate the workers of all the packing centers have lost more than \$3,000,000 in wages in only a month's idleness.

The packers, on the other hand, assert that their losses will be very slight in comparison, as their actual money losses have not been very heavy, but instead they have been able to dispose of much of the accumulated stock from the warehouses.

A few more than twenty thousand men and women employed directly by the packing-houses here are on strike, according to reports of the packers, and 80 per cent. of their places, they say, have been filled. Computed from statements issued by the different packers since the strike was called, the following table, giving the number of workers on strike and the monthly payroll of each plant, is here summarized:

	Number employees month before strike.	Monthly payroll before strike.
Armour & Co.....	5,500	\$280,000
Swift and Company.....	4,800	225,000
Nelson Morris & Co.....	3,000	185,000
Hammond Packing Co.....	2,200	135,000
Libby, McNeil & Libby.....	1,800	110,000
Schwarzschild & Sulzberger	1,200	56,000
Anglo-Amer. Packing Co...	1,200	55,000
Omaha Packing Co.....	1,200	55,000
Totals	20,900	\$1,101,000

The strike leaders have not been pleased with the manner in which the Chicago city officials have endeavored to uphold the law and prevent the strike pickets and sympathizers from interfering with the business of the packers. The leaders are very sore at Mayor Harrison, and chagrined because their little game of politics failed to work with him. When the Mayor endeavored to bring the packers and strike leaders together neither side would come forward, the packers because they considered the strike over from their standpoint, and the strike leaders because they were mad at the Mayor. President Donnelly made the excuse that he had to attend a meeting of the hog butchers. "And the hog butchers are a great deal more important to me than the Mayor," said the head of the strikers. "Harrison was too long getting in. He has heard our say for fair police treatment, and has ignored it. He need not think that now he can snap his fingers or whistle and have us come to do his bidding."

The strikers' relief committees are now furnishing relief to over 3,000 persons every day, and upwards of 60,000 pounds of meat is given out. The strikers' families are in dire need, and there is a great deal of suffering, which the leaders try to hide, despite the fact that they are appealing to labor organizations all over the country for aid. The shoe is beginning to pinch hard.

Charged with threatening the life of David Levi, nephew of Nelson Morris, and superintendent at the Morris plant, B. Capek was arrested on a warrant sworn out before Justice Quinn. Levi alleges that Capek, who is a striking butcher, had taken clothing belonging to a non-union workman. Levi said that when he attempted to secure possession of the clothing he was threatened with death by Capek.

WESTERN FERTILIZER MARKET.

(Special Letter to The National Provisioner.)

Chicago, August 18.—There is considerable anxiety on the part of fertilizer manufacturers as to their requirements of blood and tankage. The strike in the blood and tankage producing centers in the West during the last five weeks has reduced the output of these commodities materially. This, in connection with the fact that some of the very large buyers did not operate last spring on their contracts as usual, necessitating their coming into the market for actual needs in the very near future, indicates a pretty active and interesting market.

The export demand for tankage and blood this year, and the demand for tankage for feeding purposes, seems to be the cause of moderate stocks in the hands of sellers at this time of the year. It is reported that, notwithstanding the growth of the country should increase the production of blood and tankage, the amount of blood and tankage available for fertilizer purposes is rather decreasing than increasing, on account of the outlets in other directions. This, in a measure, explains higher prices ruling the last two or three years in the western ammoniate market.

MARKET CLASSES OF CATTLE.

The exhibit of market classes and the various grades of cattle at the World's Fair will be the first display of this character ever made. The Illinois Experiment Station has the honor of presenting the exhibit, which can but serve a valuable purpose in demonstrating the value of improved breeding or otherwise, as well as to illustrate the commercial uses of all the market classes and grades of cattle that are daily sold at the various stock yards of the country. It is predicted that this exhibit of cattle will strongly emphasize the great value of and the necessity of using only the best sires of the improved breeds of beef cattle.

The management of the Exposition announces as a feature of the cattle exhibit at St. Louis during September this exhibit of the market classes and grades of cattle. The exhibit is now being prepared by the Illinois Experiment Station under the direction of Professor Herbert W. Mumford, head of the Animal Husbandry Department in the University of Illinois. No experiment station bulletin ever attracted more attention than Bulletin No. 78 of the Illinois Experiment Station, in which Professor Mumford illustrated and described for the first time the various market classes and grades of cattle as recognized in the large American markets.

The Exposition authorities believe that they cannot do anything better calculated to serve the cattle breeders and feeders and the students of agricultural colleges than to accord liberal space to this exhibit, which has already attracted universal interest. One animal of each grade will be used to illustrate that particular grade. Each stall will bear a label showing to what grade the animal belongs, accompanying a brief description together with its market value and the use to which it is put. The exhibit will comprise some forty-eight individual animals varying greatly in quality and condition from the prime steer of show yard merit to the inferior canner.

In the beef cattle class prime, choice, good, medium and common rough steers will be shown; in the butcher stock prime, choice, good and medium heifers, prime, choice, good and medium cows, and choice, good and medium bulls; among cutters and canners the good, medium and common cutters and the good, medium and inferior canners and bologna bulls; in addition to the above, stockers and feeders and veal calves of the various grades will be included.

CANNED BUTTER.

Canning butter is a new industry. The successful canning of butter is difficult because the process of cooking or even heating must be avoided. The product must have good keeping qualities to begin with, and it must be faultlessly sterilized as a second

care. Therefore, butter made from pasteurized cream keeps best. The pasteurizing of cream at a temperature high enough to destroy the enzyme goes far toward preventing the development of the aerobic forms which cause the rapid increase of acidity and exclude certain anaerobic yeasts which are liable, under certain circumstances, to produce a slow development of acidity.

The canning of butter is done largely in New Zealand and Australia. The product is shipped chiefly to the mines in West and South Australia and to the interior points of the Federated States. Heavy shipments of this product are now being forwarded from Australia to South Africa. After more than 200 days the substance has been found to be in excellent condition and very palatable. The air develops a bacteria after considerable exposure when the butter is taken from cold storage into relatively high temperature. Since 1890 the canning of butter has become a more exact science.

WOULD HAVE OLEOMARGARINE.

The Food Commissioner of Ohio got a shock some days ago when he read the advertisement of the Commissary of the State militia, calling for "colored oleomargarine." The order was for nearly 6,000 lbs. of it. Ohio neither allows the manufacture nor the sale of colored oleomargarine within its borders, and here was the State itself calling for it. The stuff had to be bought outside of the State, and no Ohio State merchant could bid for the supply.

There is no law to keep a man from handing it out or to prevent a man from eating colored oleomargarine in Ohio. The anti-oleomargarine law is a blot and should be wiped off. Incidents like this show its farcicality, and show that people want colored butterine. The law is a dairyman's and not an Ohio citizen's law.

MEAT ECONOMY.

Grace—Will took me to lunch downtown to-day.

Ethel—What did you have?

Grace—Oh, nothing much. Just green turtle soup, pate de foie gras, canvasback duck, some anchovy salad, ice cream and coffee. He wanted to have meat instead of the geoselivers and duck, but I wouldn't let him on account of the strike. You know, I want him to economize.

Ethel—Sweet of you, dear. I hope he appreciated it.

Grace—I don't believe he did, but then men are awfully selfish, you know.—Cincinnati Commercial Tribune.

HIS SUIT.

"What's the matter?" queried the Igorrote lover. "Don't you favor my suit?"

"I do not," replied the American girl, as she called a guard to remove him from her presence.

"Well," soliloquized the native later, as he looked at his G string costume, "it isn't much of a suit."—Houston Post.

in BY-PRODUCTS for SMALL PACKERS

— GET IT OUT WITH THE AID OF THE —

\$

EXPERT

CHEMISTS

\$

OF THE

STILLWELL-

PROVISIONER

LABORATORY

CHICAGO PROVISION LETTER.

Special Letter to The National Provisioner from G. D. Forsyth & Co.)

Chicago, Aug. 17.—We quote to-day's market as follows: Green hams, 10@12 avg., nominally 9½c.; 12@14 avg., nominally 9½c.; 14@16 avg., nominally 9½c.; 18@20 avg., nominally 9½c. Green picnics 5@6 avg., nominally 7½c.; 6@8 avg., nominally 7½c.; 8@10 avg., nominally 7½c.; 10@12 avg., nominally 7½c. Green N. Y. shoulders, 10@12 avg., nominally 7½c.; 12@14 avg., nominally 7½c. Green skinned hams, 18@20 avg., nominally 10½c. Green clear bellies, 8@10 avg., nominally 10c.; 10@12 avg., nominally 9½c. No. 1 S. P. hams, 8@10 avg., 10½c.; 10@12 avg., 10c.; 12@14 avg., 9½c.; 14@16 avg., 9½c.; 18@20 avg., 10½c. No. 2 S. P. hams, 10@12 avg., 9½c.; 12@14 avg., 9½c.; 14@16 avg., 9½c. No. 1 S. P. skinned hams, 14@16 avg., 11½c.; 16@18 avg., 11½c.; 18@20 avg., 11½c.; 20@22 avg., 11½c.; 22@24 avg., 11c.; 24@26 avg., 10½c.; 26@28 avg., 10½c. No. 2 S. P. skinned hams, 12@14 avg., 10½c.; 18@20 avg., 11c.; 24@26 avg., 10½c. No. 1 S. P. picnics, 5@6 avg., 7½c.; 6@7 avg., 7½c.; 7@9 avg., 7½c.; 8@10 avg., 7½c.; 10@12 avg., 7½c. No. 1 S. P. N. Y. shoulders, 8@10 avg., 7½c.; 10@12 avg., 7½c. S. P. clear bellies, 8@10 avg., 10c.; 10@12 avg., 9½c.

CHICAGO PROVISION MARKET

RANGE OF PRICES

SATURDAY, AUGUST 13, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.80	6.85	6.80	6.80	6.80
6.85	6.85	6.90	6.85	6.87

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.45	7.45	7.45	7.45	7.45
7.45	7.45	7.45	7.42	7.45

PORK—(Per barrel)—				
Sept.	Oct.	High.	Low.	Close.
11.57	11.65	11.65	11.65	11.62
11.65	11.75	11.65	11.65	11.70

MONDAY, AUGUST 15, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.80	6.80	6.82	6.80	6.82
6.80	6.80	6.82	6.80	6.82

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.47	7.47	7.47	7.42	7.47
7.45	7.45	7.47	7.42	7.47

PORK—(Per barrel)—				
Sept.	Oct.	High.	Low.	Close.
11.70	11.82	11.72	11.60	11.67
11.82	11.82	11.67	11.67	11.77

TUESDAY, AUG. 16, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.85	6.85	6.92	6.82	6.85
6.85	6.95	7.02	6.90	6.92

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.50	7.50	7.52	7.37	7.32
7.50	7.50	7.52	7.32	7.37

WEDNESDAY, AUGUST 17, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.87	6.87	6.97	6.77	6.87
6.87	6.92	6.97	6.85	6.97

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.37	7.37	7.37	7.25	7.35
7.42	7.42	7.45	7.30	7.42

PORK—(Per barrel)—				
Sept.	Oct.	High.	Low.	Close.
11.40	11.57	11.40	11.40	11.57
11.57	11.67	11.47	11.65	11.65

THURSDAY, AUGUST 18, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.87	6.87	6.97	6.87	6.95
6.87	6.97	7.05	6.97	7.02

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.35	7.35	7.47	7.25	7.45
7.40	7.40	7.52	7.40	7.50

PORK—(Per barrel)—				
Sept.	Oct.	High.	Low.	Close.
11.70	11.87	11.67	11.77	11.77
11.85	11.92	11.65	11.82	11.82

FRIDAY, AUGUST 19, 1904.

LARD—(Per 100 lbs.)—				
Sept.	Oct.	High.	Low.	Close.
6.97	6.97	6.97	6.87	6.90
7.07	7.07	7.07	6.97	7.00

RIBS—(Boxed 25c. more than loose)—				
Sept.	Oct.	High.	Low.	Close.
7.50	7.50	7.50	7.42	7.42
7.55	7.57	7.50	7.50	7.50

PORK—(Per barrel)—				
Sept.	Oct.	High.	Low.	Close.
11.87	11.95	11.70	11.72	11.72
11.95	12.00	11.77	11.80	11.80

CHICAGO LIVE STOCK

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep
Monday, Aug. 8.....	19,118	568	24,472	20,625
Tuesday, Aug. 9.....	5,368	1,498	10,321	16,621
Wednesday, Aug. 10.....	21,068	778	25,769	17,708
Thursday, Aug. 11.....	7,388	601	34,007	9,022
Friday, Aug. 12.....	2,085	316	25,226	4,994
Saturday, Aug. 13.....	210	103	7,005	2,500

Totals this week.....	53,287	3,860	126,800	71,470
Previous week.....	49,802	4,910	108,161	79,172
Cor. week 1903.....	59,715	5,061	145,961	95,679
Cor. week 1902.....	60,917	6,390	137,130	81,023

SHIPMENTS.

Monday, Aug. 8.....	5,486	130	6,988	8,980
Tuesday, Aug. 9.....	2,453	772	2,592	7,719
Wednesday, Aug. 10.....	5,670	118	5,677	4,491
Thursday, Aug. 11.....	5,545	331	8,405	7,524
Friday, Aug. 12.....	4,065	201	5,736	2,384
Saturday, Aug. 13.....	1,001	50	3,002	2,002

Totals this week.....	24,210	1,000	29,300	33,100
Previous week.....	20,333	1,453	30,039	48,325
Cor. week 1903.....	21,246	272	26,506	30,072
Cor. week 1902.....	17,962	406	30,553	18,849

Combined receipts of hogs at eleven markets for week ending Aug. 13, 1904.....	302,000
Week ago.....	330,000
Year ago.....	408,000
Two years ago.....	356,000

Total receipts for year to date, 13,584,000, against 13,500,000 year ago, 13,937,000 two years ago.	
Receipts at six points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City), as follows:	

	Cattle.	Hogs.	Sheep.
Week ending Aug. 13.....	135,200	325,500	133,600
Week ago.....	112,200	248,000	116,700
Year ago.....	161,100	312,200	171,600
Two years ago.....	154,700	302,900	139,000

CHICAGO HOG SLAUGHTER.

Chicago packers slaughtered hogs during week ending Aug. 13 as follows:	
Armour & Co.....	21,800
Anglo-American.....	7,000
Continental.....	3,000
Swift & Company.....	18,100
Hammond & Co.....	2,600
Morris & Co.....	6,200
Boyd-Lunham & Co.....	9,600
S. & S.....	2,700
H. Moore & Co.....	6,300
Roberts & Dale.....	3,300
Other packers.....	18,800

Total.....	99,400
Left over.....	7,000
Week ago.....	87,500
Year ago.....	133,300
Two years ago.....	133,400
Three years ago.....	103,100

AVERAGE PRICE OF HOGS.

Week ending Aug. 13.....	\$5.32
Previous week.....	5.33
Year ago.....	5.41
Two years ago.....	6.81
Three years ago.....	5.87

Estimated receipts of live stock week ending August 20th:	
Cattle.....	55,000
Hogs.....	120,000
Sheep.....	75,000

AVERAGE PRICE OF GOOD BEEF CATTLE.

Week ending August 6.....	\$5.50
Previous week.....	5.35
Three weeks ago.....	5.80
Year ago.....	4.75
Two years ago.....	6.80

Cattle.	
Beeves, choice to prime.....	\$5.80@5.15
Steers, good to choice, 1,200 to 1,600 lbs.....	5.40@ 5.75
Steers, fair to good exporters and shippers.....	4.85@ 5.30
Steers, medium beef.....	4.10@ 4.75
Steers, inferior and plain.....	3.50@ 3.90
Steers, grass Texas.....	2.40@ 4.25
Steers, fed Texas.....	4.00@ 5.10
Steers, western range.....	3.50@ 4.65
Cows and heifers, fair to good.....	3.10@ 3.75
Cows and heifers, good to fancy.....	3.85@ 4.60
Cows, good cutting to fair beef.....	2.10@ 3.00
Cows, common to good canners.....	1.00@ 2.00
Cows, grass Texas.....	2.40@ 4.25
Stockers and feeders, poor to fair.....	2.15@ 3.40
Stockers and feeders, good to choice.....	3.60@ 4.15
Bulls, poor to choice.....	1.75@ 4.00
Calves, common to fair.....	2.50@ 4.50
Calves, good to fancy.....	4.75@ 5.75

Hogs.	
Heavy shippers, good to choice.....	\$5.35@5.45
Butcher weights, good to choice.....	5.35@ 5.50
Heavy packing, rough to fair.....	4.00@ 5.15
Heavy mixed, plain to good.....	4.95@ 5.35
Assorted light, 150 to 180 lbs.....	5.45@ 5.55
Good to choice, 185 to 200 lbs.....	5.40@ 5.50
Pigs, poor to choice, 60 to 120 lbs.....	4.30@ 5.50

Sheep.	
Wethers, good to prime mixed.....	\$3.85@4.10
Mixed lots, fair to good.....	3.25@ 4.00
Wethers, western grass, fair to prime.....	3.60@ 4.00
Ewes, fair to fancy.....	3.25@ 3.75
Ewes, plain to good breeding.....	3.50@ 4.00
Culls, backs and scaldwags.....	2.00@ 3.00
Yearlings, good to prime.....	4.15@ 4.50
Yearlings, poor to fair.....	3.25@ 3.75
Lambs, fat western range.....	5.25@ 6.00
Lambs, spring, good to prime.....	5.00@ 5.50
Lambs, spring, poor to fair.....	3.50@ 4.75

CHICAGO RETAIL FRESH MEATS.

NOTE.—It is difficult to quote flat retail figures applicable to the whole of the city, every market having a practically different scale according to location, class and volume of trade, etc.

Beef.

Native Rib Roasts.....	18@20
" Sirloin Steaks.....	18@20
" Porterhouse Steaks.....	25
" Pot Roasts.....	10
Rib Roasts from light cattle.....	13@16
Beef stew.....	5@ 6
Boneless Corned Briskets.....	10
Corned Rumps.....	10
" Ribs.....	6
" Flanks.....	5
Round Steaks.....	10@14
" Roasts.....	12@14
Shoulder Steaks.....	10
" Roasts.....	10
" Neck End Trimmed.....	8

Lamb.

Hind Quarters.....	16
Fore.....	12½
Legs.....	18
Stew.....	8
Shoulders.....	10
Ribs.....	20
Loins.....	20
Chops.....	25

Mutton.

Legs.....	12½
Stew.....	5
Shoulders.....	10
Hind Quarters.....	14
Fore.....	12
Rib and Loins.....	16

Pork.

Pork Loins.....	12
" Chops.....	15½
" Tenders.....	22
" Butts.....	12
Spare Ribs.....	9
Blades.....	6
Knuckles.....	6
Pigs Heads.....	6
Leaf Lard.....	10

Veal.

Hind Quarters.....	14
Fore.....	10
Breasts.....	16
Shoulders.....	8@10
Cutlets.....	20

BUTCHERS' OFFAL.

Tallow.....	3 @ 34c.
Mixed Bone and Tallow.....	2¼ @ 2¼
Calfskins 8 to 15 lb.....	11@11½
Calfskins under 8 lb.....	each 65¢

SOUTH WATER STREET MARKETS.

Live Poultry.

Turkeys.....	10 @ 11
Chickens.....	11 @ 11½
Hens.....	12
Roosters.....	7
Springs.....	13
Ducks.....	10
Geese.....	8 @ 9

Iced Dressed Poultry.

Turkeys.....	@ 11
Chickens.....	10½ @ 11½
Springs.....	12 @ 13½
Ducks.....	10
Geese.....	8 @ 9

Veal.

Choice.....	@ 9
Heavy..... 85 to 120 lbs.....	8 @ 8½
Medium..... 65 to 80 lbs.....	7 @ 7½
Small..... 50 to 60 lbs.....	6 @ 6½
Coarse..... small to heavy.....	5 @ 5½

Look up the

MARKET PRICES

CHICAGO.

WHOLESALE FRESH MEATS.

Carcass Beef.

Western Cows.....	54¢ @ 6
Native Cows.....	54¢ @ 6 1/2
Western Steers.....	54¢ @ 7
Good Native Steers.....	54¢ @ 8 1/2
Native Steers, Medium.....	74¢ @ 8
Heifers, Good.....	74¢ @ 8 1/2
Heifers, Medium.....	64¢ @ 8 1/2
Hindquarters.....	14¢ over straight Beef
Forequarters.....	14¢ under "

Beef Cuts.

Steer Chucks.....	54¢ @ 6
Cow Chucks.....	44¢ @ 5
Boneless Chucks.....	44¢ @ 5
Medium Plates.....	44¢ @ 3
Steer Plates.....	44¢ @ 3 1/2
Cow Rounds.....	84¢ @ 8 1/2
Steer Rounds.....	84¢ @ 8 1/2
Cow Loins, Common.....	84¢ @ 8 1/2
Cow Loins, Medium.....	84¢ @ 8 1/2
Cow Loins, Good.....	84¢ @ 8 1/2
Steer Loins, Light.....	104¢ @ 12 1/2
Steer Loins, Heavy.....	104¢ @ 16
Beef Tenderloins, No. 1.....	104¢ @ 12 1/2
Beef Tenderloins, No. 2.....	104¢ @ 12 1/2
Strip Loins.....	104¢ @ 7
Sirloin Butts.....	104¢ @ 10
Shoulder Clods.....	64¢ @ 6 1/2
Rolls.....	64¢ @ 10
Rump Butts.....	64¢ @ 6
Trimnings.....	44¢ @ 4 1/2
Shank.....	44¢ @ 3
Cow Ribs, heavy.....	64¢ @ 10 1/2
Cow Ribs, Common Light.....	64¢ @ 7
Steer Ribs, Light.....	104¢ @ 11
Steer Ribs, Heavy.....	104¢ @ 14 1/2
Loins Ends, steer-native.....	104¢ @ 11
" cow.....	64¢ @ 9
Hanging Tenderloins.....	64¢ @ 5
Flank Steak.....	74¢ @ 9

Beef Offal.

Livers.....	24¢ @
Hearts.....	24¢ @
Tongues.....	13¢ @
Sweetbreads.....	20¢ @
Ox Tails, each.....	3¢ @
Fresh Tripe—plain.....	4¢ @
" H. O.....	4 1/2¢ @
Kidneys.....	4¢ @
Brains.....	3¢ @

Veal.

Heavy Carcass Veal.....	64¢ @
Light Carcass.....	74¢ @ 8
Medium Carcass.....	74¢ @ 8
Good Carcass.....	74¢ @ 9
Medium Saddles.....	104¢ @
Good Saddles.....	104¢ @
Medium Racks.....	64¢ @
Good Racks.....	64¢ @ 7

Veal Offal.

Brains.....	4¢ @
Sweetbreads.....	25¢ @
Hearts.....	25¢ @
Livers.....	25¢ @
Plucks.....	25¢ @
Heads, each.....	10¢ @

Lambs.

Medium Caul.....	74¢ @
Good Caul.....	84¢ @
Round Dressed Lambs.....	104¢ @
Saddles Caul.....	104¢ @
R. D. Lamb Saddles.....	144¢ @
Caul Lamb Racks.....	64¢ @
R. D. Lamb Racks.....	74¢ @
Lamb Fries, per pair.....	84¢ @
Lamb Tongues, each.....	84¢ @
" Kidneys, each.....	14¢ @

Mutton.

Medium Sheep.....	64¢ @
Good Sheep.....	74¢ @ 7 1/2
Medium Saddles.....	74¢ @
Good Saddles.....	84¢ @
Medium Racks.....	44¢ @ 5
Good Racks.....	64¢ @
Mutton Legs.....	84¢ @
Springfield Lambs.....	84¢ @
Saddles Springfield.....	84¢ @
Springfield Lamb Racks.....	84¢ @
Mutton Stew.....	44¢ @ 5
" Loins, each.....	4¢ @
" Tongues, each.....	4¢ @
Heads, each.....	5¢ @

Fresh Pork, Etc.

Dressed Hogs.....	74¢ @
Pork Loins.....	94¢ @
Leaf Lard.....	7¢ @
Tenderloins.....	17¢ @
Spare Ribs.....	64¢ @
Butts.....	9¢ @
Hocks.....	5¢ @
Trimnings.....	5¢ @
Tails.....	3¢ @
Spouts.....	3¢ @
Pigs Feet.....	3¢ @
Pigs Heads.....	3¢ @
Knuckles.....	2¢ @
Blade Bones.....	4¢ @
Cheek Meat.....	4¢ @
Hog Plucks.....	3¢ @
Neck Bones.....	3¢ @
Skinned Shoulders.....	74¢ @
Pork Hearts.....	2¢ @
" Kidneys.....	2¢ @
" Tongues.....	10¢ @
Slip Bones.....	84¢ @
Tail.....	8¢ @

Brains.....	3¢ @
Backfat.....	6 1/2¢ @
Rinds.....	3¢ @
Hams.....	11 1/2¢ @ 13
Calas.....	9¢ @ 9 1/2
Shoulders.....	9¢ @ 9 1/2
Belies.....	8 1/2¢ @ 10

SAUSAGE.

Cloth Bologna.....	54¢ @
Bologna, large, long, round and cloth.....	54¢ @
Choice Bologna.....	54¢ @
Viennas.....	54¢ @
Frankfurts.....	54¢ @
Bood, Liver, and Headcheese.....	54¢ @
Tongues.....	9¢ @
White Tongue.....	9¢ @
Minced Ham.....	9¢ @
Prepared Ham.....	10¢ @
New England Ham.....	12¢ @
Compressed Ham.....	10¢ @
Large Compressed Ham.....	10¢ @
Berliner Ham.....	10 1/2¢ @
Boneless Ham.....	10 1/2¢ @
Oxford Ham.....	10 1/2¢ @
Polish Sausage.....	7¢ @
Leona, Garlic, Knoblauch.....	7¢ @
Smoked Pork.....	7¢ @
Veal Ham.....	7¢ @
Farm Sausage.....	12 1/2¢ @
Pork Sausage, bulk or link.....	7 1/2¢ @
Pork Sausage, slab link.....	8¢ @
Special Prepared Ham.....	8¢ @
Boneless Pigs Feet.....	8¢ @
Ham Bologna.....	7¢ @
Special Compressed Ham.....	8¢ @
Boston Roll.....	12¢ @
Cubana Sausage.....	9¢ @

Summer Sausage.

Supreme Summer, H. C., New Medium Dry.....	16¢ @
German Salami, " Dry.....	15¢ @
Holsteiner ".....	11¢ @
Mettwurst ".....	11 1/2¢ @
Farmer ".....	12¢ @
Danish, H. C., New.....	18¢ @
Italian Salami, New.....	18¢ @
Monarque Cervelat.....	13¢ @

Sausage in Oil.

Smoked Pork, 1-50.....	43¢ @ 75
" 2-30.....	25¢ @
Bologna 1-50.....	27¢ @
" 2-30.....	25¢ @
Viennas 1-50.....	42¢ @
" 2-30.....	37¢ @

Sausage in Brine.

Fresh Pork Link.....	8¢ @
Liver Sausage.....	7¢ @
Blood Sausage.....	7¢ @
Head & neck.....	7¢ @
Bologna.....	6 1/2¢ @
Vienna.....	6 1/2¢ @

VINEGAR. PICKLED GOODS.

Pickled Pigs Feet, in 200 lb. barrels.....	7.00 @
Pickled Plain Tripe, in 200 lb. barrels.....	5.00 @
Pickled H. C. Tripe, in 200 lb. barrels.....	9.25 @
Pickled Ox Lips, in 200 lb. barrels.....	11.00 @
Pickled Pigs Snouts in 200 lb. barrels.....	22.00 @
Lamb Tongue, Short Cut, bbls.....	36.00 @

WHOLESALE SMOKED MEATS.

Hams, 12 lbs. average.....	11 1/2¢ @
" 14 " " ".....	11 1/2¢ @
" 16 " " ".....	11 1/2¢ @
Skinned Hams.....	12 1/2¢ @
Calas, 6/7 lbs. average.....	9 1/2¢ @
" 8/12 " " ".....	9 1/2¢ @
Breakfast Bacon, fancy.....	18 1/2¢ @
Wide, 8/10 average, and Strip, 4/5 average.....	11 1/2¢ @
" 10/12 " " ".....	11 1/2¢ @
" 12/14 " " ".....	11 1/2¢ @
Dried Beef Sets.....	13 1/2¢ @
" Inside.....	16¢ @
" Knuckles.....	14¢ @
" Outside.....	14 1/2¢ @
Regular Boiled Hams.....	17¢ @
Smoked.....	17 1/2¢ @
Boiled Picnic Hams.....	13¢ @
Cooked Loins.....	19¢ @

BARRELED BEEF AND PORK.

Extra Plate Beef.....	Per bbl. 9.00 @
Plate Beef.....	8.50 @
Extra Mess Beef.....	8.50 @
Prime Mess Beef.....	9.00 @
Beef Hams.....	18.50 @ 15.00
Rump Butts.....	9.50 @ 10.00
Moss Pork (repacked).....	12.50 @
Clear Fat Backs.....	14.25 @
Family Back Pork.....	14.50 @
Bean Pork.....	11.25 @

DRY SALT MEATS.

Clear Bellies, 14/16 average.....	9 1/2¢ @
Rib Bellies.....	9 1/2¢ @
Fat Backs.....	7¢ @
Regular Plates.....	6 1/2¢ @
Short Cuts.....	8 1/2¢ @ 9

CORNED, BOILED AND ROAST BEEF.

1 D. 2 doz. to case.....	Per doz. 1.30 @
2 D. 1 or 2 doz to case.....	2.40 @
4 D. 1 doz. to case.....	4.86 @
6 D. 1 doz to case.....	8.00 @
14 D. 1/2 doz. to case.....	18.00 @

EXTRACT OF BEEF.

1 oz. jars 1 dozen in box.....	Per doz. 2.55 @
2 oz. jars 1 dozen in box.....	6.50 @
4 oz. jars 1 dozen in box.....	11.00 @
8 oz. jars 1/2 dozen in box.....	22.00 @
2, 5 and 10 lb. tins.....	\$1.75 per lb

LARD.

Pure leaf, kettle rendered, per lb, tcs.....	84¢ @
Lard substitute, tcs.....	84¢ @
Lard compound.....	84¢ @
Barrels.....	1/2c. over tcs.
Tubs, from 10 to 20 lb.....	1/2c. to 1c. over tcs.
Cooking Oil, per gal.....	@ 35c.

BUTTERINE.

F. O. B. CHICAGO.

No. 1, natural color.....	@ 10
No. 2, " ".....	@ 11 1/2
No. 3, " ".....	@ 11 1/2
No. 4, " ".....	@ 12 1/2
No. 5, " ".....	@ 14
No. 6, " ".....	@ 15

SAUSAGE CASINGS.

Beef round, set of 100 ft.....	@ 12
Beef middles, set of 57 ft.....	@ 25
Beef bungs, each.....	54¢ @ 54¢
Hog casings, per lb salt.....	23 1/2¢ @ 24
Hog bungs, exports.....	@ 9 1/2
" medium, each.....	5¢ @ 5 1/2
" small, each.....	@ 2 1/2
Sheep casings, per bundle, narrow.....	@ 25
" imported, medium, 63.....	@ 65
" wide.....	@ 80
" Special med.....	@ 70

FERTILIZERS.

Dried blood, per unit.....	@ 2.40
Hoof meal, per unit.....	@ 2.30
Concent. tank, 15 to 16x per unit.....	@ 2.20
Ground tank, 10 to 11x per unit.....	2.17¢ @ 10c.
Unground tank, 10 to 11x per unit.....	2.10¢ @ 10c.
Unground tank, 9 and 30x, ton.....	21.00 @
Unground tank, 6 and 35x, ton.....	15.00 @
Ground raw bone, per ton.....	22.00 @ 23.00
Ground steam bone, per ton.....	18.00 @

HORNS, HOOFS AND BONES.

Horns, No. 1, 65 to 70 lb, avg. ton.....	\$250.00 @
Horns, black, per ton.....	23.00 @
Horns, striped, per ton.....	28.00 @
Horns, white, per ton.....	40.00 @
Round Shin Bones, 38 to 40 lb, avg. ton.....	40.00 @
Round Shin Bones, 50 to 52 lb, avg. ton.....	60.00 @
Long Thigh Bones, 90 to 95 lb, avg. ton.....	90.00 @
Flat Shin Bones, 38 to 40 lb, avg. ton.....	45.00 @

LARDS.

Prime steam, cash.....	@ 6.80
Prime steam, loose.....	@ 6.35
Neutral.....	7 1/2¢ @ 9¢
Compound.....	8 1/2¢ @ 9¢
Leaf.....	6 1/2¢ @ 6 1/2¢

STEARINES.

Lard.....	7 1/2¢ @ 7 1/2¢
Oleo.....	7¢ @ 7 1/2¢
Mutton.....	@ 6 1/2
Tallow.....	5 1/2¢ @ 5 1/2¢
Grease.....	4 1/2¢ @ 4 1/2¢

OILS.

Lard Oil, extra winter strained tcs.....	@ 60
Lard Oil, No. 1.....	@ 45
Lard Oil, No. 2.....	@ 42
Oleo Oil, extra.....	7 1/2¢ @ 14
Oleo Oil, No. 2.....	6 1/2¢ @ 6 1/2
Nutsfoot Oil, pure tcs.....	@ 42 1/2
Tallow, prime.....	@ 48

TALLOW.

Edible.....	54¢ @ 54¢
Packers' prime.....	5¢ @ 5 1/2
Prime Country.....	4 1/2¢ @ 5
Packers No. 1.....	4 1/2¢ @ 4 1/2
City Renderers.....	4 1/2¢ @ 4 1/2
Packers No. 2.....	3 1/2¢ @ 3 1/2

GREASE.

White, Choice.....	4 1/2¢ @ 4 1/2
" "A".....	4 1/2¢ @ 4 1/2
" "B".....	4 1/2¢ @ 4 1/2
Bone.....	3 1/2¢ @ 3 1/2
House.....	3 1/2¢ @ 3 1/2
Yellow.....	4 1/2¢ @ 4 1/2
Brown.....	3 1/2¢ @ 3 1/2

CURING MATERIALS.

Refined saltpetre.....	44¢ @ 54¢
Boracic acid, crystal to powdered.....	104¢ @ 111
Borax.....	7 1/2¢ @ 8
Sugar.....	
Pure, open kettle.....	37¢ @ 4
White, clarified.....	45¢ @ 5
Plantation, granulated.....	@ 54¢
Yellow, clarified.....	43¢ @ 43¢
Salt.....	
Ashton, in bags, 224 lb.....	\$2.35 @
Eng. packing, in bags, 224 lb.....	1.45 @
Michigan, medium, car lots, per ton.....	3.25 @
Michigan, granulated, car lots, per ton.....	2.10 @
Casing salt, bbls., 250 lb. 2X and 3X.....	0.95 @

COOPERAGE.

Tierces.....	1.25 @ 1.27 1/2
Barrels, Oak.....	1.05 @ 1.07 1/2
" Ash.....	55¢ @ 57 1/2

COTTONSEED OILS.

P. S. Y. in bbls.....	@ 28 1/2
P. S. Y. in tanks.....	@ 25 1/2
Prime Crude, in tanks.....	@ 24 1/2
Butteroil, in bbls.....	@ 30

NEW YORK CITY

LIVE CATTLE.

Good to choice native steers.....	\$5.85 @ \$6.10
Medium to fair native steers.....	4.50 @ 5.25
Poor to ordinary native steers.....	3.00 @ 4.25
Oxen and stags.....	2.75 @ 5.00
Bulls and dry cows.....	1.70 @ 4.25
Good to choice native steers one year ago.....	5.10 @ 5.50

LIVE CALVES.

Live veal calves, a few selected.....	100 lb @ 7 1/4
Live veal calves, good to prime.....	100 lb 7 1/4 to 7 3/4

LIVE HOGS.

Hogs heavy weights (per 100 lbs.).....	@ 6.20
Hogs, medium.....	@ 6.25
Hogs, light to medium.....	@ 6.30
Pigs.....	@ 6.40
Roughs.....	5.20 @ 5.50

LIVE SHEEP AND LAMBS.

Spring lambs, selected.....	per lb 7 1/4
Spring lambs, good to choice.....	per lb 6
Spring lambs, culls.....	6 1/4
Sheep, selected.....	per 100 lb 4 1/2
Sheep, medium to good.....	per 100 lb 4
Sheep, culls.....	per 100 lb 3

DRESSED BEEF.

Choice native, heavy.....	8 1/4 @ 9 1/4
Choice native, light.....	8 1/4 @ 9
Common to fair, native.....	8 1/4 @ 7 3/4

WESTERN DRESSED BEEF.

Choice native, heavy.....	9 1/4 @ 9 1/4
Choice native, light.....	8 1/4 @ 9
Native, com. to fair.....	8 @ 8 1/4
Choice Western, heavy.....	7 3/4 @ 8
Choice Western, light.....	7 @ 7
Common to fair, Texan.....	4 1/4 @ 6 1/4
Good to choice helters.....	7 1/4 @ 7 3/4
Common to fair helters.....	6 3/4 @ 7
Choice cows.....	6 3/4 @ 7
Common to fair cows.....	4 1/4 @ 6
Good to choice oxen and stags.....	7 1/4 @
Common to fair oxen and stags.....	6 1/4 @ 6 3/4
Freshy Bologna bulls.....	5 1/4 @ 6 1/4
Fresh pork loins, Western.....	10 @ 11

DRESSED CALVES.

Veals, city dressed, prime, per lb.....	11 @ 12
Veals, good to choice, per lb.....	11 @ 11 1/4
Calves, country dressed, prime, per lb.....	10 @ 11
Calves, country dressed, fair to good.....	7 @ 9
Calves, country dressed, common.....	6 @ 7

DRESSED HOGS.

Pigs.....	8 1/4 @ 9 1/4
Hogs, heavy.....	@ 7 1/4
Hogs, 180 lb.....	@ 7 3/4
Hogs, 160 lb.....	@ 7 3/4
Hogs, 140 lb.....	@ 8 1/4

DRESSED SHEEP AND LAMBS.

Spring lambs, choice.....	per lb 12
Spring lambs, good.....	@ 11
Spring lambs, culls.....	@ 10
Sheep, choice.....	@ 9
Sheep, medium to good.....	@ 8
Sheep, culls.....	@ 7

PROVISIONS.

(Jobbing Trade)

Smoked hams, 10 lb average.....	@ 12 1/4
Smoked hams, 12 to 14 lb average.....	@ 12 1/4
Smoked hams, heavy.....	@ 12 1/4
California hams, smoked, light.....	@ 9 1/4
California hams, smoked, heavy.....	@ 9 1/4
Smoked bacon, boneless.....	@ 12 1/4
Smoked bacon (rib in).....	@ 12 1/4
Dried beef saw.....	@ 10 1/4
Smoked beef tongues, per lb.....	@ 10 1/4
Smoked shoulders.....	@ 10 1/4
Pickled bellies, heavy.....	@ 10 1/4

BONES, HOOF, HAIR AND HORNS.

Round shin bones, av. 50-60 lb cut, per 100 bones, per 2,000 lb.....	\$55.00
Flat shin bones, av. 40-45 lb cut, per 100 bones, per 2,000 lb.....	40.00
Thigh bones, av. 90-95 lb cut, per 100 bones, per 2,000 lb.....	75.00
Hoofs.....	15.00
Horns, 7 1/2 oz. and over, steers, first quality.....	\$70 @ 285

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	50c to 75c a piece
Fresh Cow Tongues.....	35c to 50c a piece
Calves' head, scalded.....	30c to 40c a piece
Sweet breads, veal.....	25c to 75c a pair
Sweet breads, beef.....	16c to 18c a lb
Calves' liver.....	25c to 50c a piece
Beef kidneys.....	7c to 12c a piece
Mutton kidneys.....	14c to 24c a piece
Livers, beef.....	4c to 5c a lb
Oxtails.....	5c to 7c a piece
Hearts, beef.....	10c to 15c a piece
Rolls, beef.....	10c to 12c a lb
Tenderloin beef, Western.....	15c to 25c a lb
Lamb's fries.....	6c to 10c a pair
Fresh pork loins, city.....	12 1/4 @ 13
Fresh pork loins, Western.....	10 @ 11

BUTCHERS' FAT.

Ordinary shop fat.....	2 @ 3
Suet, fresh and heavy.....	3 @ 5
Shop bones, per cwt.....	@ 25

PICKLED SHEEPSKINS.

XXX sheep, per dozen.....	@ \$5 75
XX sheep, per dozen.....	@ 4.50
X sheep, per dozen.....	@ 3.75
Billad Ribby sheep.....	@ 3.75
Sheep, ribby.....	@ 3.12 1/4
XX lambs, per dozen.....	@ 4.50
X lambs, per dozen.....	@ 3.50
No. 1 lambs, per dozen.....	@ 3.00
No. 2 lambs, per dozen.....	@ 2.00
Culls, lambs.....	@ 75

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	80
Sheep, imp., wide, per keg, 50 bundles.....	\$40.00
Sheep, imp., medium, per bundle.....	60
Sheep, imp., per bundle, narrow.....	44
Sheep, imp., Russian Rings.....	
Hog, American, in tea or bbla., per lb, F.O.B.....	42
Hog, American, kegs, per lb, F. O. B.....	42
Beef, rounds, per set, f. o. b. Chicago.....	12
Beef, rounds, per set f. o. b. N. Y.....	15
Beef, rounds, per lb.....	2
Beef, bungs, piece, f. o. b. N. Y.....	6 1/4
Beef, bungs, per lb.....	5
Beef, middles, per set, f. o. b. Chicago.....	35
Beef, middles, per set, f. o. b. N. Y.....	37
Beef, middles, per lb.....	@ 6 1/4
Beef wassanda, per 1,000, No. 1's.....	@ 5
Beef wassanda, per 1,000, No. 2's.....	2 1/4 @ 3

SPICES.

	Whole.	Ground
Pepper, Sing., white.....	15	30
Pepper, Sing., black.....	12	13 1/4
Pepper, Penang, white.....		
Pepper, red, Zanzibar.....	15	10
Pepper, shot.....	14	
Allspice.....	7 1/4	10
Coriander.....	5 1/4	7
Cloves.....	18	30
Mace.....	55	60

SALTPETRE.

Crude.....	8 1/4 @ 3 1/4
Refined—Granulated.....	4 1/4 @ 4 1/4
Crystals.....	4 1/4 @ 5 1/4
Powdered.....	4 1/4 @ 5

GREEN CALFSKINS.

No. 1 calfskins.....	per lb .14
No. 1 calfskins, buttermilk.....	.12
No. 1 calfskins, 12-14.....	each 1.50
No. 2 calfskins, buttermilk.....	.10
No. 2 calfskins, 12 1/4-14.....	piece 1.30
No. 1 grassers.....	per lb .12
No. 2 grassers.....	per lb .00
No. 1 heavy kips, 18 lb and up.....	piece 1.00
Ticky kips, 18 lb and up.....	piece 1.40

BUTTER.

Creamery, Extras.....	17
" Firsts.....	15 @ 15 1/4
" Second.....	13 @ 14
Dairies, Choice.....	@ 15
" Firsts.....	@ 12 1/4
" Ladies.....	@ 12
" Packing stock.....	@ 11

EGGS.

Extras.....	@ 20 1/4
Prime firsts.....	@ 18 1/4
Firsts.....	17 @ 17 1/4
Fresh, at mark, cases inc.....	12 1/4 @ 16 1/4

DRESSED POULTRY.

FRESH KILLED—ICED.

Turkeys—Western, hens, average run.....	14 @ 15
Western, 10ms, average run.....	14 @ 15
Common.....	12 @ 13
Spring Chickens—Phila., 2 1/4 @ 4 lbs. to pair, per lb.....	21 @ 22
Phila., mixed sizes, per lb.....	17 @ 19
Pa., 3 1/4 @ 4 lbs. to pair, fancy, per lb.....	15 @ 19
Pa., mixed sizes.....	15 @ 17
Pa., under 3 lbs. to pair, per lb.....	13 @ 14
Western, dry-picked, large, per lb.....	15 @ 16
Western, scalded, large, per lb.....	15 @ 16
Western and Southern, small.....	13 @ 14
Fowls—Western, dry-picked, average best.....	13 @ 14
Western, scalded, average best.....	13 @ 14
Western, Southern & Southwestern, dry-picked, average best.....	13 @ 13 1/4
Western, Southern & Southwestern, scalded, average best.....	13 @ 13
Western & Southern, fair to good.....	12 @ 12 1/4
Old cocks, per lb.....	@ 9
Spring Ducks—Long Island.....	15 @ 15 1/4
Eastern.....	13 @
Jersey, Pa. & Virginia, fancy.....	15 @
Jersey, Pa. & Virginia, fair to good.....	13 @ 14
Western.....	8 @ 11
Spring Geese—Eastern, white.....	17 @ 18
Eastern, dark.....	14 @ 16
Squabs—Prime, large, white, per dozen.....	2.00 @
Mixed, per dozen.....	2.00 @
Dark, per dozen.....	1.50 @

LIVE POULTRY.

Spring chickens, nearby, per lb.....	@ 15
Fowls, per lb.....	@ 13 1/4
Roosters, per lb.....	@ 9
Turkeys, per lb.....	@ 13
Ducks, average, Western, per pair.....	70 @ 80
Geese, Western, per pair.....	1.00 @ 1.25
Live Pigeons, per pair.....	20 @ 25

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

Bone meal, steamed, per ton.....	\$23.00 @ 23.00
Bone meal, raw, per ton.....	25.00 @ 25.50
Nitrate of soda—future.....	2.12 1/4 @ 2.15
Nitrate of soda, spot.....	2.15 @ 2.20
Bone black, spot, per ton.....	13.50 ch
Dried blood, N. Y., 12-13 per cent. ammonia.....	2.85 @ 2.90
Dried blood, West. high grade, fine ground, c. f. N. Y.....	2.75 @ 2.80
Tankage, 9 and 20 p. c., f. o. b. Chicago.....	21.00 @ 22.00
Tankage, 8 and 20 p. c., f. o. b. Chicago.....	18.00 @ 19.00
Tankage, 7 and 20 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Tankage, 6 and 20 p. c., f. o. b. Chicago.....	15.00 @ 16.00
Garbage tankage, f. o. b. New York.....	8.00 @ 9.00
Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate.....	30.00 @ 30.00
Wat. acidulated, 6 p. c. ammonia, per ton.....	14.00 @ 15.00
Asotone, per unit, del. New York.....	2.80 @ 2.85
Sulphate ammonia gas, for shipment, per 100 lbs.....	3.05 @ 3.05
Sulphate ammonia gas, per 100 lbs. spot.....	@ 3.10
Sulphate ammonia bone, per 100 lbs.....	3.05 @ 3.10
So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston.....	6.50 @ 7.75
So. Carolina phosphate rock, undried, f. o. b. Ashley River, per 2,400 lbs.....	3.50 @ 3.75
The same, dried.....	3.75 @ 4.00

POTASHES, ACCORDING TO QUANTITY.

Kalnit, shipment, per 2,240 lbs.....	\$8.95 @ 9.50
Kalnit, ex-store, in bulk.....	9.00 @ 10.65
Kieserit, future shipment.....	7.00 @ 7.95
Muriate potash, 80 p. c., ex-store.....	1.88 @ 1.95
Muriate potash, 80 p. c., future shipment.....	1.80 @ 1.90
Double manure salt (46 @ 49 p. c., less than 2 1/4 p. c. chloride), to arrive, per lb.....	1.00 @ 1.13
Sulphate potash, to arrive (basis 90 p. c.).....	2.06 @ 2.30
Sylvinit, 24 to 30 p. c., per unit, S. P.....	80 @ 40

CHICAGO

(Live Stock Commission Company.)

(Special to The National Provisioner from the Bowles)

CATTLE.—Receipts of cattle for the first three days this week, 39,961, against 46,154 for the corresponding period last week and 60,428 for the same time last year. Daily receipts were: Monday, 16,390; Tuesday, 6,575; Wednesday (estimated), 17,000.

The supply this week being moderate, the market Monday advanced 15c. to 25c. on desirable native steers, and sales in some instances showed as much as 40c. advance from the low time of last week. Plain and medium natives sold a shade lower. The receipts included about 5,000 Western rangers Monday, and this kind sold 10c. to 15c. lower, which had a depressing effect upon values of common natives. Best range steers sold at \$4.70 for one load of western natives. The southern cattle that formed a large proportion of the cattle that were fattened in the Northwest sold from \$3.75 to \$4. The market to-day was active and strong, with best natives selling at \$6.10. About 15 cars of prime steers, weighing 1,206 to 1,594 lbs., sold from \$6 to \$6.10. Medium to good cattle sold from \$5 to \$5.60, and cattle good enough to sell up around \$5.75 were choice. Yearling steers of good quality and fat are quotable at \$5.50@5.75; fair to good light steers, \$4.75@5.50, and common to fair kinds \$3.75@4.75; inferior light killers down to \$3.25. Good dressed beef and shipping steers sold around \$5. Export cattle, 1,250 lbs. and up, \$5.25@5.75. Three loads of fancy range steers, averaging about 1,340 lbs., sold at \$4.80@4.85, the next highest sale being \$4.40 for two loads averaging 1,331 lbs., out of the same shipment, and three loads averaging 1,253 lbs. at \$4.15, these being the only sales over \$4.00.

A lot of 112 head of Mexican steers double wintered in Wyoming sold at \$3.60, averaging 1,045 lbs. Desirable Texas steers are selling around \$3.90 and heifers at \$3.40. Best native cows and heifers \$4@4.50, with a few fancy heifers up to \$5; fair to good kinds, \$3.25@4; common to fair, \$2.25; canners and cutters, \$1.25@2.60; choice heavy steers, \$3.60@4; bolognas, \$2.40@2.75; feeders, \$2.30@3; thin light bulls, \$1.75@2.25; veal calves, \$4.75@6.25 for good to choice; common, \$2.50@4.50. Stockers and feeders 25c. lower this week. Best heavy feeders, \$3.75@4; good kind around \$3.50; common to medium light killers, \$2@3.

The packers seem to have won their fight against the labor unions, and it appears now only a matter of a short time before business will be running along as usual, at full capacity again. Country advices indicate a liberal movement of cattle in the near future.

HOGS.—Receipts of hogs for the first three days this week show a falling off of about 15,000 as compared with the same days last week. Monday's run of 16,016 was much lighter than the trade expected, and the opening market for the week was active at prices 5c. to 10c. higher, there being a liberal demand from both local packers and Eastern shippers. Tuesday's run was about 10,000, which was again much lighter than the trade expected, and the early market for selected grades of both light and butchers was 5c. to 10c. higher. The common kinds

of mixed packers, however, showed no advance at any time, and the late market on Tuesday was weak and lower on all grades; even the best light and butchers at the close could be sold no higher than on Monday, and over 5,000 were left in the pens unsold. To-day (Wednesday) we had about 20,000 fresh receipts, which, together with the holdovers, made a liberal supply. Speculators and shippers bought a few choice light hogs and butchers early in the day at prices only about 5c. lower than yesterday. The big packers, however, held off and demanded concessions before they would operate, and the result was that the general market was 10c. to 15c. lower, closing flat with a large number unsold. There is a fairly steady demand for prime light weights and medium weight butchers, but there is little or no demand for heavy packing hogs, and several thousand of this kind are carried over from day to day, having to be forced on the market at very low prices. We quote to-day's prices as follows: Prime, medium and heavy butchers, \$5.25@5.40; prime light butchers, \$5.35@5.45; selected light hogs, \$5.35@5.45; mixed grades, \$5@5.25; heavy packers, \$4.75@4.90; pigs, \$5@5.25.

SHEEP.—Receipts of sheep and lambs fairly liberal. Great majority of the stuff western. Native lambs are rather scarce, and choice kinds are in good demand at \$5.50@5.75. Western lambs broke sharply and now best are selling at \$5.60. Wethers, yearlings and ewes in good demand at prices about 10c. lower than last week; good to choice western wethers selling at \$3.75 to \$3.90 and yearlings up to \$4.50, fat ewes finding ready sale at \$3.25@3.50. All feeding stock is in strong demand at unchanged prices from those quoted last week. Good feeding lambs, \$4.60@4.75; yearlings, \$3.50@3.75, and wethers, \$3.25@3.50.

Swift & Company had quite a big string of western sheep and yearlings shipped from the river markets to-day. Strike situation unchanged, but all the packers now operating.

KANSAS CITY

(Special to The National Provisioner.)

Kansas City, Aug. 19.

CATTLE.—Receipts this week, 41,700; last week, 36,800; same week last year, 52,200. Good dry lot steers have been scarce this week, and are 30 to 50c. above last week. The best ones sell at \$5.50 to \$5.80. Medium beef steers and grassers sold lower yesterday, but are still 10 to 15c. above last week. Best cows and heifers are steady; others 15 to 25c. lower; canners are dead dull. Veals unchanged. Quarantine steers higher, at \$3.25 to \$4; cows are a shade lower, \$2.20 to \$2.70. Good stockers and feeders are strong; others slow. Stock calves are lower and dull.

HOGS.—Receipts this week, 35,400; last week, 58,200; same week last year, 30,900. The tendency of the hog markets has been higher. Shipping demand has been light on account of the Eastern labor trouble, and packers have not been forced to show much anxiety, but say they could use more hogs than are coming. The quality is not as good as last week, indicating that future runs will not be heavy, and prices are therefore good. The market is 5 to 10c. higher

to-day. Pigs and light hogs are up to \$5.35; medium weights, \$5.05 to \$5.25; heavies \$5 to \$5.15.

SHEEP.—Receipts this week, 17,900; last week, 12,900; same week last year, 14,900. Sheep prices are 10 to 15c. lower than last week on killing grades. Feeders are steady and in demand. Lambs are 20 to 30c. lower. A liberal proportion of the receipts have been westerns of fair to good quality. Offerings of natives have lacked quality. The packers have easily absorbed the supply, lower prices being the result of breaks at Chicago. Lambs bring up to \$5.60; native wethers, \$4; ewes, \$3.60; western yearlings, \$3.40 to \$3.70; feeders, \$3 to \$3.40.

HIDES. are steady; green salted, 9c.; dry flint butcher, over 15 lbs., 15½c.; fallen, 14c.; under 16 lbs., 12½c.; dry glue, 7c.; sheep pelts, 10½c.; horse hides, \$2 to \$3.

Packers' purchases this week:

	Cattle.	Hogs.	Sheep.
Armour	8,421	11,636	5,816
Cudahy	2,784	6,731	721
Schwarzschild	3,901	4,203	1,043
Swift	5,323	9,787	3,081

CATTLE SLAUGHTERED.

Special reports to The National Provisioner show the number of cattle slaughtered at the following centers for the week ending August 13:

Chicago	31,894
Omaha	7,334
St. Joseph	11,682
Cudahy	470
South St. Paul	2,205
Cincinnati	2,930
Louisville	980
New York and New Jersey	9,671
Fort Worth	5,116
Detroit	1,633

HOGS SLAUGHTERED.

Special reports to The National Provisioner show the number of hogs slaughtered at the following centers for the week ending August 13:

Chicago	99,529
Omaha	17,196
St. Joseph	32,920
Cudahy	13,334
Ottumwa	17,553
Cedar Rapids	9,973
Bloomington	1,265
South St. Paul	5,512
Cincinnati	13,599
Indianapolis	25,645
Louisville	5,400
New York and Jersey City	24,829
Fort Worth	1,534
Detroit	3,648

SHEEP SLAUGHTERED.

Special reports to The National Provisioner show the number of sheep slaughtered at the following centers for the week ending August 13:

Chicago	38,696
Omaha	7,404
St. Joseph	21,786
Cudahy	406
South St. Paul	3,241
Cincinnati	1,001
New York and Jersey City	48,282
Fort Worth	274
Detroit	2,984

NEW YORK LIVESTOCK

WEEKLY RECEIPTS TO AUG. 15, 1904.

	Beef.	Cows.	Calves.	Sheep.	Hogs.
Jersey City.....	1,874	—	2,397	44,688	8,765
Sixtieth street.....	1,322	60	9,180	3,666	7
Fortieth street.....	—	—	—	—	13,506
Lehigh Valley.....	7,328	—	—	—	—
Weehawken.....	1,462	—	—	1,008	—
Scattering.....	—	65	55	28	2,550

Totals.....	11,983	125	8,638	49,450	24,829
Totals last week.....	12,400	164	7,978	51,806	21,700

WEEKLY EXPORTS TO AUG. 15, 1904.

	Live cattle.	Live sheep.	Qrs. beef.
Sw'child & Salsberger, Sa. Victorian.....	432	—	—
Sw'child & Salsb., Sa. Minneapolis.....	505	—	—
J. Shambert & Son, Sa. Victorian.....	419	1,068	—
J. Shambert & Son, Sa. Minneapolis.....	505	—	—
J. Shambert & Son, Sa. Terence.....	280	—	—
J. Shambert & Son, Sa. Trinidad.....	20	40	—
Morris Beef Co., Sa. Victorian.....	—	—	2,200
Armour & Co., Sa. Victorian.....	—	—	1,000
C. H. Kentzen & Co., Sa. Numidian.....	285	—	—
Cudaby Packing Co., Sa. Campania.....	—	—	900
L. S. Dillenback, Sa. Korona.....	—	60	—

Total exports.....	2,437	1,168	4,700
Total exports last week.....	2,813	1,018	11,100

Boston exports this week.....	1,005	751	—
Philadelphia exports this week.....	1,928	—	—
Baltimore exports this week.....	1,405	1,136	—
Portland exports this week.....	700	742	—
Newport News exports this week.....	718	—	—
Montreal exports this week.....	4,463	461	—
To London.....	2,995	—	4,700
To Liverpool.....	5,888	4,158	—
To Glasgow.....	2,466	—	—
To Bristol.....	330	—	—
To Manchester.....	877	—	—
To Cardiff.....	237	—	—
To Bermuda and West Indies.....	20	100	—

Totals to all ports.....	12,813	4,258	4,700
Totals to all ports last week.....	13,955	3,228	16,500

RECEIPTS AT CENTRES

SATURDAY, AUGUST 13.

	Cattle.	Hogs.	Sheep.
Chicago.....	200	7,000	2,500
Kansas City.....	1,500	3,000	—
Omaha.....	175	7,000	1,000

MONDAY, AUGUST 15.

Chicago.....	15,000	17,000	18,000
Kansas City.....	9,000	4,000	3,000
Omaha.....	6,200	1,100	250

TUESDAY, AUGUST 16.

Chicago.....	5,500	10,000	15,000
Kansas City.....	8,000	9,000	2,000
Omaha.....	1,500	2,000	3,200

WEDNESDAY, AUGUST 17.

Chicago.....	17,000 steady	20,000 slow	15,000 steady
Kansas City.....	9,000	9,000	2,000
Omaha.....	4,000 slow	5,000 steady	3,000

THURSDAY, AUGUST 18.

Chicago.....	6,500	15,000	15,000
Kansas City.....	6,000	7,000	2,000
Omaha.....	2,300	6,200	3,700
St. Louis.....	5,000	8,000	2,000
Sioux City.....	500	2,500	—
Fort Worth.....	400	500	—

FRIDAY, AUGUST 19.

Chicago.....	3,000	12,000	6,000
Kansas City.....	2,000	6,000	1,000
Omaha.....	1,600	6,600	2,800
St. Louis.....	2,500	2,500	1,000
St. Joseph.....	2,000	3,700	4,000
Fort Worth.....	250	300	—

WESTERN GLUE MARKET.

(Special to The National Provisioner.)

Chicago, Aug. 15.—We are advised that the demand for all grades of glue, except the very high grades and what is known as commercial gelatines, continues to be good. This prevails both in the east and middle west. Quotations on high, medium and lower grades ruling at the present time are as follows:

Gelatine glue, extra, 22@30; No. 1, 18@22; regular, 16@18.

White, first, 12@15; second, 10@12; third, 8@10.

Cabinet, high test, 14@16; medium test, 11@14; ordinary test, 9@11.

Sizing, extra light, 11@13; light, 9@11; medium, 7½@9; brown, 6½@7½; dark, 5½@6½.

GENERAL MARKETS

LARD IN NEW YORK.

Western steam, \$6.85@7.15; city, steam, \$6.62½; refined, Continent, tcs., \$7.40; do., South Africa, tcs., \$8.00; do., kegs, \$9.00; compound, \$5.87½@6.

HOG MARKET, AUGUST 19.

CHICAGO.—Receipts, 12,000; 5@10c. higher; \$4.65@5.60.

KANSAS CITY.—Receipts, 6,000; 5@10c. higher; \$4.80@5.32½.

OMAHA.—Receipts, 7,000; higher; \$4.95@5.15.

ST. LOUIS.—10c. higher; \$5.00@5.50.

INDIANAPOLIS.—Receipts, 5,000; strong; \$5.40@5.55.

EAST BUFFALO.—Receipts, 2 cars; 5@10c. higher; \$5.60@5.75.

LIVERPOOL.

Liverpool, Aug. 19.—(By cable)—Beef, extra India mess, 58s. 9d.; pork, prime mess, western, 67s. 6d.; shoulders, 43s. 6d.; hams, s. c., 51s. 6d.; bacon, c. c., 45s.; long clear light, 46s.; do., heavy, 45s. 6d.; do., short ribs, 46s.; backs, 42s.; bellies, 46s.; turpentine, 41s. 6d.; rosin, common, 7s.; lard, prime western, tcs., 34s. 9d.; 28-lb. pails, 36s.; cheese, white, 40s.; do., colored, 41s. 6d.; American steam lard (Hamburg), 50 kilos, 34½s.; tallow, 21s. 6d.; do. Australian (London), 25s. 3d.; cottonseed oil, refined (Hull), 17s. 3d.; linseed oil (London), 17s.; petroleum refined (London), 5½d.

OLEO AND NEUTRAL LARD.

The oleo market during the past week has been quiet at unchanged prices, but with the small stocks both here and abroad it looks as if we would have higher prices yet. Neutral is considerably stronger on account of an increased demand and a scarcity in stocks. Cottonseed oil is active and strong, and a good business is being done for export.

BALTIMORE FERTILIZER MARKET.

(Special Letter to The National Provisioner from Thomas M. White & Co.)

The market for ammoniates continues quiet. There is a slight inquiry here and there from the South, but Eastern buyers show no interest in stocks either for prompt or future. Prices generally are a shade better, even for prompt, and on futures sellers' quotations are strong.

We quote: Ground tankage, 11 and 15, \$2.17½@2.20 per unit f. o. b. Chicago; ground tankage, 6 and 25, \$15@15.50 per ton f. o. b. Chicago; ground concentrated tankage, \$2.15@2.17½ per unit, f. o. b. Chicago; ground blood, \$2.35@2.37½ per unit f. o. b. Chicago; hoof meal, \$2.25@2.27½ per unit f. o. b. Chicago; crushed tankage, 9 and 20 (futures), \$2.55 and 10@2.57½ and 10 c. a. f. basis Baltimore.

Nitrate of Soda.—The market is steady with a fair volume of business reported. For 95%, prompt delivery, \$2.12½; futures, \$2.17½; for 98%, prompt, \$2.15; futures, \$2.20.

Sulphate of Ammonia.—Cables to-day advise near prospect of better prices. Quotations on futures, October to March, inclusive, \$2.97½@3.00, c. i. f. Baltimore and New York.

FRIDAY'S CLOSINGS.

Provisions.

White corn was easier early in the day on better crop weather, yet wheat was higher, and there was no reason for abatement of confidence on the hog products from the grain position; the hog products markets generally early added a little to the advance of the day before; but afterwards turned slightly easier, followed by fitful changes. The outsiders are more freely buying January, especially pork. Hogs were up 5@10c., and in moderate receipt at the packing points.

Cottonseed Oil.

Quiet, with few buyers, and their bids reduced slightly, while there is more of a desire to sell at the decline of the day before. Prices in New York: August, 28c. bid, 28½c. asked; September, 28¼@28½c.; October, 28½@29¼c.; November, 28½@29¼c.; December, 28½@29½c.; January, 28½@29½c., all bid and asked, respectively.

Tallow.

Rather firmer conditions at the west, and no change in New York. City, hhds., New York, 4½c. bid, 4½c. asked. Weekly contract deliveries made at 4½c. Chicago sold city renderers at 4½c., and prime packers, in tanks, at 5c.

Oleo Stearine.

Firm; 7c. bid; 7¼c. asked. Sales in New for week, 260,000 lbs. at 7c.

COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspegren & Co.)

The past week has been an unusually active one, with sales aggregating some 30,000 barrels on the exchange. Speculative buying has been a very important factor, and this buying has no doubt been brought about by the poorer outlook for the growing crop and the continued steady rains west of the Mississippi valley. As indicated in our last circular, large lots of October, November and December oil were, however, for sale at all the way from 29c. to 30c. Notwithstanding the fact that buying has been on an enormous scale, prices fell down again as soon as the continued buying had carried it to 30c.

The export demand has slackened off considerably. Instead of following our advance, Europe seems to have declined in price so that the foreign markets are now about 2c. below our limits. On the other hand, it must be admitted that there is almost no offering on the part of the crude oil mills, and that most of them will not sell at any price until they get their seed, which they claim will not be coming forward at such prices as they can afford to pay on basis of the present market values for oil. The demand has been principally for later deliveries.

It is hard to give an opinion on the present market, as prices will be guided to a very great extent by developments on the weather map which no man can foretell. Closing prices at noon to-day were as follows:

Prime summer yellow cottonseed oil, August, 28c. bid and 29c. asked; September, 28½c. bid and 29c. asked; October, 29¼c. bid and 29½c. asked; November, 29¼c. bid and 29½c. asked; December, 29¼c. bid and 29½c. asked; January, 29¼c. bid and 29½c. asked.

We further quote: Prime winter yellow cottonseed oil, 32c.; prime summer white cottonseed oil, 32c.; Hull quotation of cottonseed oil, 17s. 4½d.; prime crude oil in tanks in Southeast or Valley, new crop, sales at 22¼c.

RETAIL SECTION

A TRADING STAMP ILLUSTRATION.

A contemporary gives the following illustration of how trading stamps sometimes work, says the Grocers' Magazine. Incidentally it shows how a clothing merchant lost a fine customer. A man went into a store and purchased a suit of clothes and an overcoat, amounting to \$39. It happened to be a day when extra stamps were being dispensed and the total amount given him was \$114 worth of these valuable (?) pieces of sticky paper. He asked what they were for, and upon being enlightened stated that he did not want them.

"But," answered the merchant, "they cost you nothing."

"What do you pay for them?" asked the customer.

"Three per cent.," answered the merchant.

"Then this amount cost you \$3.42," said the man, "and you give me the money and take back the stamps. If you are going to give that amount to the stamp company you might as well give it to me. You have taken that much from me, which you had no right to do."

This the merchant refused to do, saying that "it would not be business," and thereby lost a customer for good.

TACT IN BUSINESS.

Tact is the quick, intuitive appreciation of what is fit and proper, an ability to see and do the right thing at the right time. Men succeed or fail because they have or have not tact, says Grocers' Magazine.

The greatest successes are not made by the brainiest men, but rather by ordinary men who possess tact, coupled with force, self-confidence and perseverance. We hear occasionally of wonderfully clever salesmen. They are pointed out as \$5,000 a year men. They look like ordinary human beings and in nine cases out of ten there's no way of immediately distinguishing them from the \$500 to \$1,000 kind. They are neatly dressed, but have less style than the \$1,000 salesmen.

"What is there so brilliant about that fellow that enables him to get so large a salary?" is naturally asked. There is nothing remarkable about the man's appearance. He looks like any other man of the same age. He dresses no better. He is agreeable to meet and does not seem to be much of a talker. There is one quality he possesses, and that's tact. He is a hard worker, and tends to business, but there are others of which the same may be said. He possesses tact—that is the story of his \$5,000. He knows when and how to see his customers and how to complete a trade when some new feature develops. Tact is his capital. He has the force needed, but it isn't always needed, and tact is always needed.

Dealers and their clerks are as a class lacking in tact. A little would help in both buying and selling. A little tact would hold trade which does not always stick. Dealers and clerks by cultivating tact can derive more benefit than most anybody else. Tact is not a born quality in most cases. It is something acquired. All one has to do to acquire it is to study human nature and consider our relation to mankind in general,

making sure that we restrain our passions.

The dealer will find a little tact will help him with his help, in collecting bills and in a thousand other ways. The clerk with tact is the man the dealer is looking for, and not many clerks have it. Many a bill has been collected and many a customer's trade retained by a little tact, which would have been lost by other methods.

Tact is a little word of four letters, but it means a whole world to all of us. Let's cultivate more of it.

THEY EAT NUT MEAT.

Detroit, Mich., has the "nut meat" fever. The rising prices of meats locally developed a substitute bill of fare of the "nut meat" order. The cafe frequenter might satisfy his hunger from the following substitute bill of fare: Broiled protose, broiled nuttolene, nut meat sausage, protose cutlets, nuttolene cutlets, hot nut sandwich, with nut butter on the side. He might eat heartily and sumptuously on broiled vegetable steaks or other meat substitutes. These viands cost about 10c. per pound, and the varied menu is provided by the vegetarian restaurants of the city. Some people in Detroit have gone nut crazy since a local physician has declared that nuts are more nutritious than meat.

SULPHURIC ACID IN VINEGAR.

The following will give those interested, to whom chemical processes are not accessible, an opportunity of testing the purity of vinegars. The process is that of Fresenius, simplified for general purposes: Put a wineglassful of the vinegar into a china tea cup, and let the cup float in water in a pint cup of tin or other metal that will stand heat. Boil the water till half the vinegar has evaporated, then drop into the cup a piece of cane sugar about the size of a grain of wheat. Continue the boiling till the liquid in the cup has evaporated, when, if the vinegar contains free sulphuric acid, the dry residue will be found to be blackened. The charring of the sugar is due to free sulphuric acid.

SUMMER GREASE FOR LIGHT AXLES.

Use vaseline or four parts of pure unsalted leaf lard and one part beeswax. Melt over slow heat and mix thoroughly. Another: Take of viscolite axle oil six parts, and one-half part by weight of beeswax; melt and unite over slow fire (steam heat is better). Apply to the arms or spindles the first two with knife, or spatula made of wood. For the latter use a squirt can. In very hot weather, or very warm climates, make the last six parts of the viscolite oil and one part beeswax.—Blacksmith & Wheelwright.

THE SHOW WINDOW.

If you want to catch the people
You must make the window bright;
If you want to hold the people
You must trim the window right;
If you want to lead your rivals
You must give the window care;
If you want to "knock 'em silly"
You must never trouble spare.

—Merchants' Review.

LOCAL AND PERSONAL.

Edward Finkling is planning to open a shop in Williamsburg, Pa., if he can find a suitable location.

The State Butchers' Association, of Michigan, and the Central Labor Union, united in a mammoth picnic and outing at Flint, Mich., on August 10. The attendance was very large.

Edward Wheeler has purchased the market of Edward Fellows on Walnut street, Wellsboro, N. Y.

D. F. Ash has bought the meat business of Sebring & Co., at Corning, N. Y. Later on he may unite it with his William street shop, but at present James McKinley has charge.

Thomas E. Coleman, of Homestead, Pa., a butcher, has filed a petition in bankruptcy, with liabilities of \$5,456 and assets of \$2,183.

At a meeting of the butchers of McAdoo, Pa., the project of erecting a large slaughterhouse was discussed, and the sentiment was unanimous toward proceeding with the work. The idea is to organize a stock company, and run the business as a co-operative plant.

Isaac Wise, of Alliance, O., will move his shop to the store on the corner of Ash and Liberty streets, that city, as soon as alterations there are completed.

Leslie Barnard and Harry Jackson, of Mackinaw, Ill., have formed a partnership, and will open a market soon.

The Retail Merchants' Association, of Alexandria, Va., having reported violations of the Sunday closing law to the mayor, he ordered the police to close up all shops selling meat, groceries, ice, milk, etc., each Sunday.

A. P. Starr has opened a market at English Center, Pa.

Eugene Spaulding, of Pittsfield, Me., has opened a market in the shop where L. H. Barden recently had a butcher shop, which was closed because he left town.

The annual field day and picnic of the Retail Butchers' and Meat Dealers' Association of Buffalo, N. Y., which was postponed from July 28th, when it rained, was held August 11. Ten thousand persons were present and everyone had hot roast beef sandwiches free. The various contests and races were run off in a lively manner and everyone voted the day a great success.

Two meat dealers in Ybor City, Fla., have been arrested for Sunday selling at the instigation of the Meat Cutters' Association, which is trying to have all markets and stores closed on the Sabbath.

Charles Conner, of Hamilton, O., has opened a market on Main street recently, which he calls the "White Market."

A. F. Harris has opened a shop at Huron, Ohio.

J. W. Bergman, formerly of Riverside, Calif., has purchased J. A. Buckingham's interest in the firm of Obarr & Buckingham, who conduct a wholesale and retail butcher business at Santa Ana. The firm will be known as Obarr & Bergman.

The failure of Fournier Sons Company, of Fall River, Mass., one of the largest meat and provision houses in the city, was due to the strike in the cotton mills there. The company did an immense business in pork products and groceries. It hopes to resume business soon. The liabilities are not yet known. Its capital was \$5,000.

L. H. Feis, who has been conducting a meat market at Franklin, Neb., has traded shops with Chas. Waddell, the Red Cloud butcher.

Henry Stutheit, of Upland, Neb., has bought the market and restaurant of L. Case. H. Z. and Gene Diller have purchased of F. Hartzell, his butcher tools and slaughter yard, at Beatrice, Neb.

Mr. Flood, of Sioux City, Ia., will open a market at Waterbury, Neb.

H. Powell will again open his market at Fullerton, Neb.

Gardner McKee has opened a shop in Humboldt, Neb.

Davis Bros., of Hobart, Okla., have sustained a \$1,000 fire loss in their meat market.

Johnston's Palace Meat Market has just been opened in the Alloway building, in Brame, Okla.

John Sanders has opened a new meat market in the Ernhart building, in Caney, Kas.

John Harter has purchased the old Swartz butcher shop in Holton, Kas.

J. E. Uplinger has just established himself in the meat business in St. Francis, Kas.

Gibbs & Clark have succeeded Wilson & Son in the butcher business in Spokane, Wash.

V. D. Hondt is putting up a new building in Spangle, Wash., and will open a meat market.

The butcher shop of Dill Bros., Lewiston, Ida., was burned recently. It was insured.

L. S. Hardesty has been succeeded in the meat business in Butte, Mont., by Hardesty & Thompson.

Clarence Bump has started a meat market in Forest Grove, Ore.

John C. Ellis has succeeded to the entire business of the Laramie Meat Co., in Laramie, Wyo.

E. E. Murphy has purchased the meat business of McDonald Bros., in Sumner, Mo.

Thos. J. Wallace has admitted a partner in his meat business in Denver, Colo., and the firm is now Wallace & Reinert.

A. F. Hopper has purchased the meat market of O. B. Cookley, in Collbran, Colo.

Wm. Merriman has sold his grocery and meat business in Denver, Colo., to W. H. Ritter.

W. F. Finch has purchased the meat business of N. P. Rasmussen, in Plainville, Kas.

Tasso Miller has sold his meat market in Russell, Kas., to James Miller.

William Wild, Sr., has succeeded to the meat market of Wild & Son, in White Cloud, Kas.

Stutzman & Conner have purchased the meat business of John Meyn, in Boyden, Ia.

Pearly O'Deel has just opened a new meat market in Coffeyville, Kas.

B. J. Evans has recently opened a butcher shop in Snyder, Tex.

W. E. Howard has disposed of his meat business in Abilene, Kas., to A. B. Shepherd.

John Sutton has admitted a partner in his meat business in Altamont, Mo., and the firm is Castor & Sutton now.

A. G. Buell has purchased the meat market of E. Volkman, in Chapman, Neb.

P. H. Sullivan has sold out his meat business in Dixon, Neb., to M. Conway.

J. F. Quinn has just engaged in the meat business in Galva, Kas.

J. L. Jones has disposed of his grocery and meat business in Hot Springs, Ark., to John W. Hildreth.

Owing to the dissolution of the meat firm of Hobbs & Lucas, Kensington, Kas., the business will be continued by M. R. Hobbs.

John Martinosky has admitted a partner in his meat business in Rulo, Neb., and the firm is now Martinosky & Horen.

J. F. Robinson has been succeeded in the meat business in Dublin, Tex., by Myers & Robinson.

E. B. Rule has engaged in the meat business in Joplin, Mo.

T. J. Lowe & Co. have engaged in the grocery, restaurant and meat business in Davidson, Okla.

D. Duncan & Son have just opened a new meat market in Hobart, Okla.

M. Salem has sold out his grocery and meat business in Sioux City, Ia., and moved to Genoa, Neb.

R. G. Harrison has succeeded the Pearl Market Co. in the meat business in Colorado Springs, Colo.

T. B. Soudhard has opened a provision store at Washington and Exchange streets, Gloucester, Mass.

The retail butchers and grocers of Anadarko, Okla., have perfected the organization of the Anadarko Retail Grocers' and Butchers' Association by electing F. M. Beall president, J. O. Burgett vice-president, H. C. Gibbs secretary, and J. A. Leasenby treasurer. The association is for the mutual protection of the retail trade, to encourage capital, and to advance the material interests of the city.

The Butchers' Union of Hartford, Conn., has elected these officers: President, C. E. McCarthy; vice-president, Simon Freund; recording secretary, J. F. Whalen; financial secretary and treasurer, W. H. Ford; guard, Albert Crombie; guide, C. F. Hurlburt; sergeant-at-arms, C. H. Gammers; business agent, W. H. Ford; trustees, H. Gregwier, Geo. Fisher, W. S. Grant.

OBITUARY.

George G. Baier, who was engaged in the butcher business in New Brunswick, N. J., for the past thirty-five years, died August 9 at his home, No. 95 Albany street. Mr. Baier suffered a stroke of paralysis three years ago and never fully recovered therefrom.

Jonas Reinheimer, who retired from the wholesale butcher business in Manhattan a quarter of a century ago with a large fortune, died August 10 in the home of his daughter, Mrs. Henry Brussel, at 514 Pacific street, Brooklyn, in his ninety-first year. He served in the civil war with the Eleventh Regiment, known as the Washington Rifles, and was one of the three survivors of the regiment. He leaves three sons and three daughters, thirty-three grandchildren and three great-grandchildren.

John Coughlar, of Baltimore, Md., died at his residence, 416 Hartford avenue, extended, on August 7. Mr. Coughlar was born in Baltimore county on October 8, 1835, but at an early age went to Baltimore and engaged in the butcher business, in which he continued up to the time of his death. He had stalls in Lexington Market, and for the last 35 years in Belair Market. His sons were associated with him in business.

FOOD IN HOT WEATHER.

Cases of food poisoning are common in hot weather, for the reason that germ life finds the acme of its development when the days are long and the temperature high. Many cases of food poisoning are singularly mysterious. Food apparently sound may give rise to serious symptoms or to a fatal result. The food has been tainted all the same, only our senses are not delicate enough to detect the alteration.

What is scientifically called ptomaine poisoning is really food poisoning through the appearance in the article consumed of "ptomaines," which may or may not represent the poisons or toxins which result from germ growth. In other cases, and notably in the Derby pork pie poisoning, a definite microbe was found, this germ giving rise to the symptoms which mark the course of the illness.

Certain foods appear more liable than others to microbic attack. Milk is one of them, fish is another, rabbit a third and pork a fourth. Pork is more susceptible than beef because it contains a larger proportion of gelatine, and it is in this substance that the microbes find an excellent breeding ground.

When a joint comes to table not above suspicion, do not rest content with an examination of the outside thereof. The cooking may have arrested the commencing decomposition on the exterior. Plunge a clean table knife right into the center of the joint, allow it to remain a few seconds, then withdraw it and smell it. You will thus acquire indubitable proof of tainting if that condition be present.

Tinned foods need not be specially suspected, but consume them quickly after the tin has been opened. They are more liable than fresh meats to microbic attack, and

cases of foods poisoning arise when, say, half a tin has been consumed to-day, and the residue, left in some hot, uncleanly surroundings, eaten to-morrow. The to-morrow's portion will be poisonous, that of to-day is harmless, simply because it is fresh. The jelly one frequently finds in tinned tongue and meats should not be consumed in summer. It is better that such jelly should be removed altogether from the food, and the layers of the food next the tin should be rejected.

The great point here is that which applies to the care of milk. Keep all food in cleanly places, away from any possible contamination from sinks and drains. One of the saddest cases I know of was that which occurred at Carlisle some years ago. Guests at a wedding breakfast were made seriously ill and the bride died within twenty-four hours. The meats had been kept in a cellar for coolness, but the drains were defective, and the food had become infected from this source. Again the maxim, "Cleanliness before all."

I have often been asked why it is that people can eat "high" game and old cheese and yet escape ill effects. The reply is interesting. It appears that the microbes which are at first associated with decomposition of the game—these being dangerous—are succeeded by other germs which are harmless. That is to say, if game be eaten at its preliminary stages of putrefaction it may produce serious effects. Later such effects are unlikely of occurrence, because of the replacement of the first set of microbes by others which are not noxious in nature. Probably it is the same with cheese, although American investigators tell us of a very virulent poison which is apt to be developed in that food under conditions liable to give origin to serious trouble.

The end of the story is that all foods should be rigidly supervised in hot weather, and one of the chief features in respect of our safety from illness is the insuring that they are kept in a cool, clean environment.—Dr. Andrew Wilson, in London Daily Mail.

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